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Summer/Fall 1986

New England Journal of Public Policy

A Journal of the
John W. McCormack
Institute of Public Affairs

University of Massachusetts
at Boston

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A Journal of the John W. McCormack Institute of Public Affairs
University of Massachusetts at Boston

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Editor's Note

Padraig O'Malley

In recent years, New England has done itself proud. The chronic post-World War II decline in its manufacturing sector has been replaced by what for the present at least continues to be a record growth in services directly and indirectly related to high technology and a continuing competitiveness in high technology itself. As a result, the region leads the nation in growth in per capita income and enjoys the lowest level of unemployment in the country as well. Self-congratulation, however, is too often a prescription for complacency, and complacency inhibits the kind of searching inquiry which assumes that economic miracles are not the result of a divine intervention by a benign providence partial to the presumed moral superiority of New Englanders but the product of complex decisions, themselves often based on imperfectly understood relationships between social, economic, political, and cultural variables.

This issue of the *New England Journal of Public Policy* examines the nature of some of these relationships and illustrates how aggregate data are potentially misleading indicators of social and economic performance and especially inappropriate tools for formulating and evaluating public policy questions.

Thus, in Andrew Sum, Paul Harrington, William Goedicke, and Robert Vinson's analysis of poverty in New England, we find, despite the hoopla and media hype with which New England's economic boom is being marketed, that the economic resurgence has not contributed to an improvement in the relative economic welfare of those at the bottom of the income distribution. Family poverty has become more concentrated among single-parent, female-headed families, among blacks and Hispanics, and among the dependent poor. Even a casual study of the authors' data reveals the dimension of the problem: nearly half of all black and non-Hispanic families in New England in 1985 were headed by a woman, with no husband present; 85 percent of all black poverty families were headed by a woman; 80 percent of all single-parent Hispanic families headed by a woman were poor. The most conspicuous characteristic of poverty in New England, moreover, is the extent to which it is a woman's problem. The feminization of poverty has increased more rapidly in New England, according to Sum et al., than in the rest of the country, and an increasing share of the region's

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poverty population is composed of children under eighteen years of age. Three broad policy conclusions emerge: First, since the poverty problem in New England is increasingly structural, economic growth in and of itself will not eliminate it; second, strategically targeted education and job training programs for heads of poor families (most of whom are within the prime working age groups) would alleviate the problem; and third, unless specific steps are taken to reduce the proportion of children in the poverty population, the region is in danger of depleting the future potential pool of skilled labor from which it must draw if its economic revitalization is to last into the twenty-first century. This last consideration, however, will require the development of family policies at the state level, that is, measures to maintain, nurture, and strengthen families at the lower end of the socioeconomic spectrum.

Margaret O'Brien's observations on demographic trends in Boston and their probable impact on the demand for municipal services complements the conclusions of Sum et al. She, too, finds, when she disaggregates her data, that the boom which transformed the Boston skyline and stimulated growth in its population for the first time in decades has had a highly uneven impact on income distribution: Boston families were worse off in 1984 than families in the rest of the country, and, more distressingly, they were worse off in 1984 than they were in 1979. O'Brien also focuses on the feminization of poverty (78 percent of those living in poverty in Boston are women and children) and the need for family support measures in the educational sphere (half of the children in Boston schools do not live in two-parent families, and 45 percent live in poverty).

Jack Hoy provides both the rationale and the macro-context for developing state and regional manpower policies that will address poverty-related issues. The New England economy, he argues, is knowledge intensive. New England has the highest proportion of its total work force in high technology-related jobs and the highest proportion of professional and skilled technical workers in the nation. Continued growth, therefore, will depend on the capacity of the region's higher educational system to meet knowledge-intensive employment demands, a task that will become increasingly difficult, given the anticipated decline in college enrollments, especially between 1988 and 1992—a decline that will repeat itself in professional and graduate schools between 1992 and 1996. Hence the need for market-oriented labor strategies to bring single women who are household heads into the labor pool and for education-oriented strategies to improve minority retention in public schools, access to higher education, job counseling, and student financial aid. Besides addressing issues of simple economic justice, these strategies would ameliorate the imbalance between the demand for and the supply of labor and would prevent rising wage rates from eroding the region's edge in what will be an increasingly competitive, knowledge-intensive international economy.

The notion of "family" and the effectiveness of family-like support systems emerge in Ira Jackson's and Jane O'Hern's reflections on the reforms implemented by Jackson at the Massachusetts Department of Revenue. During his first three years as commissioner of revenue, annual revenue collections increased by 60 percent without any broad-based tax increases. While an innovative tax amnesty program and the judicious application of measures to improve voluntary compliance had much to do with Jackson's success, the key ingredients were the involvement of the agency's staff in the process and the conviction that em-

employees will do a good job if management provides them with the strategy, resources, and power to get it done—in short, the fostering of a family spirit. Management and employees would either sink or swim together, their respective efforts a collaborative arrangement, not a competitive confrontation.

Jackson and O'Hern also emphasize the crucial need to identify and cultivate an external constituency and to harness its advocacy potential by articulating and then communicating a sense of mission in simple and understandable terms—something which proponents of funding for research in Boston Harbor and Massachusetts and Cape Cod bays have as yet been unable to do, according to Gordon Wallace. Programs to clean up the harbor/bay system, he maintains, are inherently flawed, since “one cannot hope to effectively manage what one does not understand.” He concludes that Boston’s application for a waiver from the Clean Water Act-mandated requirement for secondary treatment of sewage was both deficient and wasteful because it failed to generate the information required for future management decisions. The cost of this failure, according to Wallace, will continue to be immense, since the investment already undertaken to “correct” the problem took place in the almost total absence of a scientific understanding of the harbor and its adjacent waters. On the other hand, a small investment, relative to the total costs of the current harbor cleanup effort, could generate the knowledge required for effective management of these resources. Given this investment and the continued growth of a well-informed and vocal constituency, Wallace is optimistic that the current degradation of Boston Harbor and its adjacent bays can yet be reversed.

Considerations of family underlie many of the contributions in this edition of the journal. It is perhaps only fitting, therefore, that our series on the New England state of mind should address itself to this subject. *The Clouds: A Portrait of One Family in Wartime Cambridge*, by Fanny Howe, is a poignant memoir of the loss that accompanies interruptions and disruptions in family life. Yet it is also a memoir of the continuity and the sense of community that provide stable environments in which loss and the remembrance of things past can be assimilated and finally accommodated.

Finally, Shaun O'Connell also links continuity and community in his inquiry into how Boston's sense of itself is reflected in its imagery: “Boston’s history is characterized by . . . pervasive social divisions, but Boston offers in compensation an ideal vision of itself which . . . renews its sense of communal, political, and literary life.” In this conclusion lie the implicit beliefs that social cohesiveness is in part a by-product of the mythologies of the past and that those who establish public policy without an understanding of these traditions do so not only at their own peril but with peril to the public they supposedly serve. 🐼

Poverty Amid Renewed Affluence:

The Poor of New England at Mid-Decade

Andrew M. Sum
Paul E. Harrington
William B. Goedicke
Robert Vinson

This article examines the problem of poverty in New England during the current period of economic prosperity. Major trends in the size and composition of the poor population within the region are analyzed. Striking changes in the relative incidence of poverty have occurred among families in New England. As the economy has moved toward full employment, poverty rates among husband-wife families in the region have fallen sharply. In contrast, female-headed families in New England have not benefited substantially from recent rapid increases in employment opportunities. The result has been a persistent trend toward the feminization of poverty in New England. The bulk of poor female family heads are of working age and could potentially be brought into the region's work force. However, education and training services that can successfully attack fundamental barriers to labor force participation must be delivered to these women. Programs designed to overcome low levels of educational attainment and deficient basic skills must be combined with child care and other social services in order to further reduce overall poverty rates across the New England region.

During the first half of the 1980s, the New England economy performed extraordinarily well, both on an absolute basis and relative to the rest of the United States. The economy of our region, along with that of individual states within it, has been the focus of an increasing number of media reports and studies and commentary by political leaders and public officials. *Business Week* recently noted that New England is the "in" spot in business. The "rebirth" of the region's economy has been heralded, and frequent references have been made

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to the “economic miracle” of Massachusetts and the “economic renaissance” of Boston.¹

While some claims about the New England economic miracle are exaggerated, one has to recognize that substantial progress has been achieved in reducing overall unemployment and in raising the average incomes of residents of our region.² As the data in table 1 indicate, the annual average unemployment rate of the region was only 4.4 percent during 1985. (All of the data utilized in this article were derived from the March 1985 supplement to the Current Population Survey, a monthly sample of households conducted by the U.S. Bureau of the Census.) This rate was nearly three full percentage points below that of the nation (7.1 percent), and the gap between the unemployment rates of the region and those of the entire country has been enlarging fairly steadily over the past six years. The median income of families in New England rose by 49.2 percent between 1979 and 1984, while the median income of all families in the United States increased by only 35 percent. Adjusting for inflation, the real median income of New England families rose by nearly 6 percent between 1979 and 1984, while that of the nation actually declined.³ Per capita incomes of New England residents rose even faster than did median family income between 1979 and 1984. The growth in per capita incomes of New England residents was 61.0 percent, versus 47.6 percent for the nation as a whole.⁴

The existence of a full or “near full” employment economy in the New England region during recent years clearly has enabled many families and individuals to increase their purchasing power over goods and services. While the “typical” family appears to have been faring quite well in recent years, it would seem highly desirable to determine whether these favorable labor market developments have enabled more families at the bottom of the income ladder to escape from the ranks of the poor. As President Franklin D. Roosevelt remarked nearly fifty years ago, the true test of an economy’s performance is how much it has contributed to the economic well-being of those at the bottom of the income distribution.⁵

Table 1

Recent Trends in Unemployment Rates, Median Family Incomes, and Per Capita Incomes of New England and the U.S., 1979 to 1984-1985

Geographic Area	Annual Average Unemployment Rates (in percentages)		Percent Change
	1979	1985	
New England	5.4	4.4	- 18.5
U.S.	5.8	7.1	+ 22.4
Median Family Incomes			
New England	\$20,724	\$30,929	49.2
U.S.	\$19,587	\$26,433	35.0
Per Capita Incomes			
New England	8,958	14,429	61.0
U.S.	8,651	12,772	47.6

Poverty Concepts and Measures

The most frequently used measure of family income inadequacy in the United States is that of the “poverty line.”⁶ The existing family poverty guidelines of the federal government have been in place for more than twenty years. Most of the initial work on the establishment of these guidelines was conducted by research staff within the Social Security Administration, under the leadership of Mollie Orshansky, during 1963 and 1964. The poverty guidelines do take into consideration the size of the family; however, with regard to Alaska and Hawaii, they do *not* take into account regional variations in the cost of living. The poverty guidelines are updated by the federal government’s Health and Human Services Department each year to reflect changes in the cost of living as measured by the U.S. Consumer Price Index (CPI). Data on the family income cutoff points that are used to determine the poverty status of families in the nation and in the New England region are presented in table 2.

As just noted, the official poverty lines of the federal government do vary by the size of the family. During calendar year 1984, the poverty line for a family of two was only \$6,762, while for a family of four it was \$10,609. Any family with a *total cash income before taxes* falling below this poverty line is considered “poor.” This cash income concept is the same as the one used in measuring median family incomes and includes all forms of property income, income from self-employment, cash public assistance income, child support payments, and retirement income, as well as wages and salaries.

Before we review our estimates of the numbers and characteristics of poor families in the New England region during recent years, we should examine the relationships between the poverty line and the median incomes of families in the nation and New England in 1984. The poverty guidelines developed by the federal government are based on an *absolute definition of poverty*, not on a relative definition. In determining the number of families that are poor at any point in time, we simply compare the total cash income of a family of a given size during

Table 2

Weighted Poverty Thresholds and Median Money Incomes of Families in the U.S. and New England by Family Size as of 1984
(numbers in current dollars)

Geographic Area	Family Size	(A)	(B)	(C)
		Poverty Line	Median Income	Poverty Line as Percentage of Median Income
U.S.	2	6,762	22,070	30.6
	3	8,277	27,181	30.5
	4	10,609	31,097	34.1
	5	12,566	30,777	40.8
	6	14,207	28,081	50.6
New England	2	6,762	25,150	26.9
	3	8,277	31,936	25.9
	4	10,609	36,089	29.4
	5	12,566	36,075	34.8
	6	14,207	42,100	33.7

a specific calendar year with the appropriate poverty line for a family of that size. Again, the poverty line is only adjusted annually to take into account changes in the cost of living as measured by the CPI. The federal government does *not* adjust the poverty line to take into account changes in the median incomes of families throughout the nation. A poverty line based on a *relative concept of poverty* would make such types of adjustments.

As we have seen, the poverty line for a family of four in the continental United States in 1984 was \$10,609. As the data in column C of table 2 reveal, the poverty line for a family of four was equal to only 34.1 percent of the median income of all families containing four persons in the United States. Even lower ratios held true for families of two and three persons in the United States during 1984. These ratios are sharply lower than those prevailing in 1964, when the official poverty guidelines were first introduced. The poverty line for a nonfarm family of four in 1964 was \$3,169, which was equivalent to nearly 42 percent of the 1964 median income of families containing four persons. Thus, the poverty line in 1984 represents a lower fraction of the median incomes of families containing two, three, or four persons than it did twenty years earlier. Poverty in the United States, thus, represents a greater degree of relative deprivation for families in 1985 than it did in prior years, particularly during the latter half of the 1960s. These findings appear to hold even more forcefully for families in New England. During 1984, the poverty lines for families of two, three, and four persons were equal to only 26.9 to 29.4 percent of the median incomes of families of the same size. Being poor in New England in 1985 means having access to a cash income flow that is on average 30 percent the size of that received by the typical family in practically each family size group.⁷

Trends in Poverty Rates Among Families

Data on trends in the rates of poverty among families in New England, the United States, and each of the New England states during the 1969–1984 period are presented in table 3. The data for the years 1969 and 1979 are based on the

Table 3

**1984 Trends in the Poverty Rates of Families in the
U.S., the New England Region, and Individual
New England States**
(numbers in %)

Geographic Area	1969	1979	1984	Percentage Point Change, 1969-1979	Percentage Point Change, 1979-1984
U.S.	10.7	9.6	11.6	- 1.1	+ 2.0
New England	6.7	7.4	7.3	+ .7	- .1
Connecticut	5.3	6.2	5.9	+ .9	- .3
Maine	10.4	9.8	10.1	- .6	+ .3
Massachusetts	6.2	7.6	7.1	+ 1.4	- .5
New Hampshire	6.7	6.1	5.1	- .6	- 1.0
Rhode Island	8.5	7.7	11.3	- .8	+ 3.6
Vermont	9.1	8.9	9.6	- .2	+ .7

findings of the decennial Censuses, while the 1984 data are based upon an analysis of the March 1985 Current Population Survey data. The CPS included interviews with 3,432 New England families during March 1985.⁸ Between 1969 and 1979, the poverty rate among families in New England actually increased, from 6.7 to 7.4 percent. This trend was dictated by rising poverty rates in Connecticut and Massachusetts and represented the reverse of what was taking place in the country as a whole. The simultaneous rise in the poverty rate among families in New England and the decline in poverty among U.S. families led to a fairly sharp reduction in the poverty rate differential in New England and the nation over the decade of the seventies.⁹ In 1969, the poverty rate among families in New England was 4.0 percentage points, or 37 percent, below the poverty rate of families throughout the United States. By 1979, the absolute size of the differential between the poverty rates of families in New England and the nation had declined to 2.2 percentage points, or 23 percent.

The decline in the absolute and relative size of the differential between the poverty rates of families in New England and the nation was influenced by labor market developments during the 1970s. During most of the seventies, unemployment problems were more severe in New England than in the country as a whole, and overall growth in the number of employed persons in the region was far below the U.S. figure. For example, payroll employment expanded much more rapidly in the nation during most of the seventies than it did in New England. Between 1973 and 1979, New England's share of the total number of U.S. non-agricultural wage and salary jobs fell by 3 percent, and our per capita income advantage fell from 9 percent in 1970 to 2 percent by 1977.¹⁰

During the past five years, the incidence of poverty among families in New England has remained basically constant, falling to 7.3 percent during 1984.¹¹ This slight decline, however, stands in sharp contrast to developments in the nation during the same time period. During 1984, 11.6 percent of all U.S. families had incomes that fell below the poverty line. While this family poverty rate was slightly below that of the previous calendar year (12.4 percent), it remained two full percentage points higher than the poverty rate of 1979. As a result of these divergent trends, the size of the poverty differential between New England and the nation widened from 2.2 percentage points in 1979 to 4.3 percentage points in 1984. By 1984, the poverty rate among families in New England was only 63 percent as high as that of the nation, a relative rate of poverty identical to that prevailing in 1969. Strong growth in wage and salary employment opportunities and low rates of unemployment in the region were key factors in producing the observed decline in the number of poor families in recent years. This decline, however, has not been uniform for all subgroups of families. Husband-wife families have been far more successful than female-headed families in their attempts to escape from the ranks of the poor in our region in recent years.

The Composition of Poor Families

The probability of a family being poor in either New England or the United States has varied systematically over the past twenty years. Poverty families have a number of characteristics that differ markedly from those of nonpoor families, and the size of these disparities has tended in a number of key instances to in-

Table 4

**1984 Poverty Rates of Families in the U.S.,
the New England Region, and Each of the
New England States, by Type of Family**
(numbers in %)

Geographic Area	Husband-Wife Families	Female Head, No Husband Present	Male Head, No Wife Present
U.S.	6.9	34.5	13.1
New England	2.8	27.9	12.3
Connecticut	1.8	21.3	23.9
Maine	5.0	42.6	13.8
Massachusetts	2.5	27.6	7.8
New Hampshire	2.5	22.3	.0
Rhode Island	4.6	32.0	19.0
Vermont	5.6	35.7	.0

crease in recent years. To illustrate several of these differences, we have prepared a set of tables that provide information on the incidence of poverty by family type, age of family head, race/ethnic group of family head, and number of earners per family. Knowledge of the characteristics of poverty families, the nature of their income inadequacy problems, and the barriers to their employment is critical to all state efforts to reduce, if not eliminate, the problem of poverty in New England during the remainder of this decade.

Table 4 provides data on the incidence of poverty in 1984 among families in the nation, New England, and each of the New England states by type of family. We have classified families into one of the following three categories: husband-wife families, families headed by a female with no husband present, and families headed by a male with no wife present. The findings reveal that in the aggregate New England families in each category experienced poverty rates below those of their counterparts in the country as a whole. Husband-wife families in New England tended to be in the most favorable position relative to all other families in the region and to husband-wife families in the nation. The poverty rate among husband-wife families in New England during 1984 was only 2.8 percent, and the poverty rate among such families was 2.5 percent or less in Connecticut, Massachusetts, and New Hampshire. This rate was only 40 percent as high as that for all husband-wife families in the country. Connecticut, Massachusetts, and New Hampshire, in particular, have come close to eliminating poverty among families in which a husband-wife couple reside. The shift toward a full employment economy and the existence of an above-average number of multiple-earner families in our region have facilitated a major reduction in the number of husband-wife families with incomes below the poverty line.¹²

In New England as a whole, female-headed families with no husband present and male-headed families with no wife present also experienced rates of poverty below those of their respective counterparts across the nation; however, the relative sizes of these differentials tended to be far smaller than the differential prevailing for husband-wife families throughout the region. For example, the poverty rate among New England female-headed families with no husband present was 27.9 percent. This rate of poverty was below that of all female-headed families

throughout the nation (34.5 percent); however, the relative size of the differential was only 20 percent. The strong growth in wage and salary employment has clearly been of less benefit to female-headed families in New England than to husband-wife families in the region, since fewer of them have managed to escape from the ranks of the poor. The CPS data are not sufficiently longitudinal in nature to explain whether this result is due to lower transition rates out of poverty or to a higher new entry rate into poverty among female-headed families.

During the past fifteen years, the composition of poor family heads in New England has changed markedly. There has been a persistent trend toward the feminization of poverty among families in our region.¹³ The probability that a single-parent family headed by a woman will be poor has been gradually rising relative to the probability of poverty among husband-wife families in New England. Similar trends have been taking place throughout the United States, though at a slower rate than in New England, reflecting the more severe unemployment problems outside of our region which have pushed more husband-wife families into poverty. Data on the relative size of these differences in poverty rates are presented for families in the nation, New England, and each of the New England states in table 5. As the table shows, during 1984 the probability of a single-parent, female-headed family in New England being poor was *ten times* higher than that for husband-wife families in the region. Also during that year, single-parent, female-headed families in the United States were *five times* more likely than husband-wife families to be poor; however, this relative difference was only one-half as large as the relative difference prevailing within our region.

The growing number of single-parent families headed by women, combined with the widening disparities in poverty rates between husband-wife families and single-parent, female-headed families in New England, has accelerated the feminization of poverty among families in the region.¹⁴ While this trend has been widely recognized and commented on by poverty analysts throughout the nation, its greater applicability to New England has not received the attention it deserves

Table 5

Ratio of Single, Female-Headed Family Poverty Rates to Husband-Wife Family Poverty Rates in the U.S., the New England Region, and Individual New England States as of 1984			
(numbers in %)			
Geographic Area	(A) Husband-Wife Families	(B) Female Head, No Husband Present	(C) Ratio of Poverty Rates (col. B divided by col. A)
U.S.	6.9	34.5	5 to 1
New England	2.8	27.9	10 to 1
Connecticut	1.8	21.3	11.8 to 1
Maine	5.0	42.6	8.5 to 1
Massachusetts	2.5	27.6	11 to 1
New Hampshire	2.5	22.3	8.9 to 1
Rhode Island	4.6	32.0	7 to 1
Vermont	5.6	35.7	6.4 to 1

Table 6

**Poor Female-Headed Families as a Percentage of
All Poor Families in the U.S., the New England
Region, and Individual New England States,
1969, 1979, and 1984**

(numbers in %)

Geographic Area	1969	1979	1984
U.S.	32.8	43.8	48.1
New England	39.8	53.0	63.2
Connecticut	44.4	59.4	63.0
Maine	29.7	37.4	54.2
Massachusetts	42.7	56.2	67.8
New Hampshire	31.4	44.4	58.8
Rhode Island	42.1	56.8	63.3
Vermont	25.9	37.4	52.1

for antipoverty policy-making efforts. Table 6 illustrates basic trends in the feminization of poverty between 1969 and 1984 in the United States, New England, and each of the New England states.

During 1969, approximately 40 percent of all poor families in New England were single-parent families headed by a woman. The size of this ratio varied by state, ranging from a high of over 44 percent in Connecticut to a low of about 26 percent in Vermont. The New England ratio exceeded by 21 percent the ratio prevailing in the nation as a whole that year. During the decade of the 1970s, the rise in the number of female-headed families in poverty was sufficiently large to make single-parent families headed by women a majority (53 percent) of all poverty families in the region. This ratio again was 21 percent higher than the U.S. ratio. During the first half of the 1980s, the feminization of poverty among families in New England has accelerated. During 1984, over 63 percent of all poor families in New England were female-headed, and such families constituted a majority of the poor in each New England state. This ratio was now 31 percent above that for the nation as a whole.

While the poverty problems of female householder families with no husband present remain the dominant family poverty problem in New England, it must be recognized that the severity of such problems varies substantially in accordance with the level of formal education attained by the householder and the presence of children in the home. Table 7, on page 14, provides relevant findings on this issue. The poverty rate among all female householder families in New England varied from a high of almost 45 percent for those families headed by an individual lacking a high school diploma to almost 22 percent for high school graduates and slightly over 17 percent for college graduates. The presence of dependent children under age eighteen has a major effect on the poverty rate. Among female householder families with no children under age eighteen, only 7.4 percent were poor, with the size of these ratios varying from 16 percent for those female householders without a high school diploma to 2.1 percent for those with college degrees. Among those female householder families with two or more dependent children under eighteen years of age, the poverty rate was 50 percent, and the rates varied from 74 percent for those lacking a high school diploma to 28.5 percent for those with a college degree.

Table 7

1984 Poverty Rates of New England Female Householder Families, No Male Spouse Present, by Years of Formal Schooling Completed (numbers in %)					
Female-Headed Families	Less than 12 Years	12 years	13-15	16 or More	All, Regardless of Educational Attainment
All, regardless of number of children	44.9	21.9	18.9	17.2	27.9
Number of children under 18					
None	16.0	4.1	.0	2.1	7.4
One	54.2	24.2	21.8	29.2	31.4
Two or More	74.0	42.9	30.3	28.5	50.0

The feminization of poverty in New England has tended to alter the nature of the poverty problem and the characteristics of the poverty population in several important respects. First, a relatively high fraction of poor, female family heads (70 percent) have had *no* recent attachment to the labor force.¹⁵ A growing portion of the family poverty population is thus comprised of the “dependent poor,” the majority of whom are dependent on public assistance payments, particularly on the Aid to Families with Dependent Children program (AFDC), to meet their basic income needs.¹⁶ Second, the vast majority of these female-headed poor families contain young children. The rise in the share of poor families with children has tended to increase the relative rate of poverty among children in New England. We will return to this issue of poverty among children later in this article.

**Poverty Rates of New England
Families by Age of Family Head**

The preceding discussions of the changing composition of poverty families in New England have focused on the structure of poor families and the gender of poor family heads. Knowledge of the age characteristics of poor family heads and the incidence of poverty among family heads in different age groups is also critical to the formulation of appropriate antipoverty strategies. If the majority of the region’s poverty families are headed by elderly persons in their retirement years (sixty-five plus), then increased reliance on *income transfer strategies* will likely be indispensable to all future efforts to reduce poverty problems. On average, only 11 percent of persons sixty-five and older in New England were actively participating in the civilian labor force during calendar year 1985.¹⁷ On the other hand, if a high and rising fraction of the state’s poverty families tends to be composed of family heads in the prime working-age groups (ages twenty-five to fifty-four), then a greater role for *labor market-oriented strategies* to combat poverty problems would seem to be called for. A comprehensive antipoverty program will contain income transfer, training and education, job placement assistance, and employment creation components; however, the appropriate mix of

such components should be based upon the characteristics of poverty family heads, their current earnings potential, and employment conditions in the local labor markets in which they reside.

During the past fifteen years, the structure of poverty rates among New England families by the age of the family head has undergone a number of important changes. In 1969, the poverty rate among New England families headed by a person sixty-five or older was 11.3 percent, a rate that was nearly 70 percent higher than that for all families in the region (6.7 percent).¹⁸ During the 1970s, major headway was made in the reduction of poverty among elderly families in New England. This reflected the trend occurring throughout the entire nation. Rising Social Security benefits for retirees, improved coverage in same for new retirees, additional financial aid to the low-income elderly through the Supplemental Security Income program, and increased private pension payments enabled an increasing share of families headed by an elderly individual (sixty-five plus) to avoid poverty. By 1979, the poverty rate of families headed by a person sixty-five or over in New England was only 5.1 percent.¹⁹ The poverty rate of families headed by persons over sixty-five years of age was thus only two-thirds as high as the rate for all families in the region during 1979. Similar favorable shifts in the relative rate of poverty among elderly families occurred throughout the United States during the decade of the seventies. As Senator Moynihan of New York has recently noted, "Poverty has almost disappeared among the aged in America. We are just about as close to eliminating poverty among the aged as we are likely to get."²⁰

Data on the 1984 poverty rates of New England families broken out by the age of the family head are presented in table 8. A review of the findings reveals strong and consistent relationships between the poverty rates of families and the age of the family head. Nearly one-third of all New England families headed by a person between the ages of sixteen and twenty-four had incomes below the poverty line during 1984. Many of these poor families are single-parent families with preschool-aged children in the home. The poverty rates of families fall consistently as the age of the family head rises, declining to 3.6 percent for families in the forty-five-to-sixty-four age group and to 3.3 percent for families headed by a person sixty-five or older.

Table 8

**1984 Poverty Rates of Families in
New England by Age of Family Head**

Age Group	Poverty Rate
All (16 +)	7.3%
16-24	33.0%
25-44	9.3%
45-64	3.6%
65 +	3.3%

The vast majority of the heads of poor families in New England are in the prime working-age groups. Our analysis of the age distribution of poor family heads revealed that 59 percent were between the ages of twenty-five and forty-four and 92 percent were under sixty-five years of age. The population of poor family heads in New England thus contains a substantial number of individuals who potentially can be brought into the civilian labor force and contribute to an expansion of the available labor pool in the region. Through coordinated education, training, and job placement programs, many poor family heads can achieve improvements in their earnings. Only 40 percent of all poor family heads in New England were actively participating in the civilian labor force in March 1985, and a relatively high fraction of this group of labor force participants (22.2 percent) were experiencing unemployment problems.²¹ Expanding and coordinating existing employment and training programs for poor family heads in the region should contribute in a substantive manner to further reductions in the size of the region's poverty population. Included in this effort would be such existing programs as ET Choices in Massachusetts and other Welfare Demonstration programs in four other New England states; Supported Work programs for welfare recipients; Title II-A Job Training Partnership Act (JTPA) programs; Job Service labor exchange activities; Housing Authority programs; and adult vocational education programs.²²

At the same time, employment and training policymakers throughout New England must take into consideration the problems of teenaged and other young mothers who have given birth to their children out of wedlock. These young women frequently lack high school diplomas, have serious deficiencies in basic academic skills, and have had little or no work experience. Barriers to their immediate employment are formidable, and they have traditionally been ignored by employment and training programs because of the higher risks and potentially higher costs involved in serving them.²³ Future state antipoverty efforts should place greater emphasis on their education and training needs. In the absence of any substantive assistance to improve their employability, they are at greatest risk of becoming the long-term dependent poor of the region. During 1985, approximately 40 percent of all poor female family heads were women who had never been married. Investing in teenaged and other young parents who have limited formal education and who are deficient in basic academic skills may well be one of the most effective methods for reducing poverty among families in the future. Such investments are unlikely to take place without strong state leadership on this issue in New England.

Race/Ethnic Characteristics of Poor Family Heads

The likelihood of poverty existing among families both in the United States as a whole and in New England has tended to vary considerably by race/ethnic group during the past two decades. Blacks and most other racial/ethnic minority groups have experienced family poverty problems at rates well above those of whites. For example, during 1979, the poverty rate among black families in New England was *four times* as high as it was among white families, and Hispanic families throughout the region experienced poverty problems at a rate *5.8 times* higher than that of white families.²⁴

Table 9

**1984 Poverty Rates of Families in the U.S. and
New England by Race/Ethnic Group of
Family Householder**
(numbers in %)

Geographic Area	(A) White	(B) Black	(C) Hispanic
U.S.	9.1	30.9	25.2
New England	5.6	22.0	47.7
New England as a % of U.S.	61.5	71.2	189.3

To assess the success achieved by New England families in selected race/ethnic groups in obtaining incomes above the poverty line, we have examined the March 1985 CPS data on the 1984 incomes and poverty status of families in New England and the nation; our analysis of these findings is presented in table 9.

During 1984, the poverty rates of both white and black families in New England were below those of each of their respective counterparts in the nation as a whole. White families in the region, however, were far more successful than black families in achieving incomes above the poverty line. Only 5.6 percent of all white families in New England had incomes below the poverty line during 1984; this was well below the poverty rate of black families in the region (22.0 percent). During 1984, as in 1979, black families in the aggregate in New England were approximately *four times* more likely than white families to be poor.

The substantial differential between the poverty rates of white and black families in New England is the product of several different factors. One of the most important of these is the difference between the family structures of whites and blacks.²⁵ Nearly one-half of all black non-Hispanic families in New England in 1985 were headed by a woman with no husband present. The estimated poverty rate for such families was nearly 40 percent. In comparison, the poverty rate among black families with both a husband and wife present in the home was only 5 percent. The sharply higher rate of poverty among black families in New England is thus critically influenced by the above-average proportion of black families headed by women and the extraordinarily high rate of poverty among black single-parent families. Our estimates of the number of black families in New England that were living in poverty in 1985 indicate that over 85 percent of them were headed by a woman. Black husband-wife families appear to have benefited from the economic expansion in New England, especially in Massachusetts; however, gains have been more limited for single-parent black families in the region, with practically no net improvement in the poverty rate for such families between 1979 and 1984.

Data on the estimated 1984 poverty rate among Hispanic families in New England appear in column C of table 9. The rate for Hispanic families throughout the region was estimated to be 47.7 percent, indicating that nearly half of all Hispanic families living in New England during 1984 had incomes below the poverty line. This poverty rate was nearly twice as high as the rate for all Hispanic families throughout the nation and was 8.5 times higher than the poverty

rate for white families in the region. This result is particularly puzzling, since it represents a deterioration in both the absolute and relative poverty positions of Hispanic families in the region at a time when overall labor market conditions were improving. It should be noted that the sample of Hispanic families in New England that were interviewed during the March 1985 CPS survey was rather small (ninety); however, the estimated deterioration is severe and needs to be given closer attention by state and local economic policymakers, especially since the Hispanic population appears to be the fastest growing segment of the region's population, particularly in Massachusetts and Connecticut.

The extraordinarily high rate of poverty among Hispanic families in New England also was influenced in a major way by the above-average proportion of Hispanic families headed by a single parent and by the severe employment problems of female Hispanic family heads. The 1985 CPS estimates indicate that nearly 80 percent of all single-parent Hispanic families headed by a woman are poor. In sharp contrast, only 5 percent of Hispanic husband-wife families were estimated to be poor during 1984. Differences in family structure and the unique labor market problems of Hispanic women thus account for a high fraction of the observed differential in poverty rates between white and Hispanic families in the New England region.

While black and Hispanic families in New England clearly experience poverty rates well above those of white families, the majority of poverty families in the region continue to be white. Even in 1985, 72 percent of all poverty families in the region were white non-Hispanic. The trend over the past five years, however, has been toward an increase in the minority share of family poverty throughout the region. During 1980, approximately 77 percent of all poor families in New England were white non-Hispanic. The rising share of family poverty accounted for by race/ethnic minority groups in New England is an issue that must be addressed by state and local policymakers involved with antipoverty efforts. The income inadequacy problems of single-parent families of all races, but particularly those from the black and Hispanic communities, must be effectively addressed if reductions in poverty are to occur. Simultaneously, state efforts to increase incentives for family formation and stability should be supported; the development of state "family policies" that would coordinate diverse efforts to strengthen families, particularly at the low end of the socioeconomic spectrum, would seem to be highly desirable at this time.²⁶

Poverty Rates and the Number of Earners in Families

The incomes of New England families are influenced to a rather considerable degree by the number of earners per family. Our analysis of the 1985 CPS data revealed that median family incomes in New England were directly related to the number of earners in the family. Families having two or more earners tended to achieve median and mean incomes well above those of families with no earners (for example, retirees and welfare recipients) or only one earner. For example, the 1984 median income of Massachusetts families with only one earner was only \$23,179; for two-earner families it was \$34,570; and for three-earner families it was \$43,500.²⁷

One would also expect that the probability of a family being poor would be

closely associated with the number of earners in the family. Families with no earners would be heavily dependent on transfer income and/or private pensions to support themselves, and the existence of monthly cash transfer payments, such as AFDC benefits, that are currently below the official poverty line would be expected to produce above-average rates of poverty. Families with multiple earners would be expected to have far fewer problems than one-earner families in securing incomes above the poverty threshold. Previous national research on the labor force behavior of wives and other secondary earners in families has consistently revealed a negative relationship between poverty rates of families and the degree of labor force participation by wives and other family members; that is, the greater the number of labor force participants in the family, the lower the probability of a family being poor.²⁸

To assess the nature of current relationships between the number of earners in families and the probability of their being poor, we have examined the March 1985 CPS data for the nation as a whole, New England, and each of the New England states. The findings of our analysis are presented in table 10. Even a casual review of the data appearing in this table reveals the existence of strong relationships between family poverty and the number of earners per family. These relationships hold true for all three geographic categories examined.

The findings in table 10 reveal that New England families in each earner category were less likely to be poor than their counterparts across the nation; however, the relative size of the differential tended to vary by the number of earners in the family. New England families with no earners had approximately a *one-in-four* probability of being poor during 1984. The incidence of poverty among no-earner families in New England was, however, 18 percent below the poverty rate for no-earner families throughout the nation during that year. One-earner families in New England were characterized by a poverty rate (12.3 percent), which was less than half that of no-earner families in the region and which was 23 percent below that of all one-earner families throughout the country. The exact reasons for the favorable poverty position of one-earner families are not completely clear at this time; however, our review of the available limited evidence suggests

Table 10

**1984 Poverty Rates of Families in the U.S.,
the New England Region and Individual New England
States by Number of Earners Per Family**
(numbers in %)

Geographic Area	No Earners	One Earner	Two or More Earners
U.S.	31.8	15.9	4.3
New England	25.9	12.3	1.3
Connecticut	23.3	10.9	.4
Maine	32.8	14.8	2.8
Massachusetts	24.8	11.2	1.4
New Hampshire	17.1	12.7	.0
Rhode Island	37.7	16.5	1.8
Vermont	29.3	17.5	3.8
New England as a % of U.S.	81.4	77.4	30.2

that the strong employment-generating performance of the New England economy has enabled more workers to obtain year-round and full-time employment, thereby increasing their annual earnings.²⁹

The poverty rate of families with two or more earners in New England was only 1.3 percent during 1984. This was only one-tenth as high as the poverty rate for one-earner families in the region, and it was 30 percent below the poverty rate of families containing two or more earners throughout the nation. The findings reveal that Massachusetts, Connecticut, and New Hampshire, in particular, have come extremely close to eliminating poverty among multiple-earner families. The movement toward a full employment economy in the region, by increasing job opportunities for wives and other family members, has clearly facilitated the ability of husband-wife families to escape poverty. The problems of poverty have become far more concentrated among families with no earners or with single earners in the New England region. For example, during 1984, nearly 90 percent of all poor families in Massachusetts had either no earners or only one earner. Future antipoverty programs in the region will have to be increasingly targeted upon the income inadequacy problems of single-parent families, who are primarily the "dependent poor," and upon the "working poor," many of whom are able to secure employment for only part of the year. As noted earlier, only a small fraction of poor families in New England are headed by elderly persons over age sixty-five. The combination of a near full employment economy and the high fraction of poor family heads in the prime working-age groups (ages twenty-five to fifty-four) should allow labor market-oriented strategies to assume a greater role in all future antipoverty efforts throughout the region.

Poverty Among Children in New England

During the past few years, there has been growing public recognition of the problems of poverty among children in the United States.³⁰ During the past fifteen years, the poverty rate among the nation's children has increased both in an absolute sense and relative to the poverty rate for adults throughout the nation.

Table 11

**Proportion of New England Families Containing
One or More Children Under 18 Years of Age,
by Size of Family Income Relative to Poverty Line
as of 1984**

Family Income	Percentage of Families with One or More Children Under 18
Below poverty line	82.1%
100% to 124% of poverty line	72.4%
125% to 149% of poverty line	55.6%
150% or more of poverty line	45.4%
All families	49.2%

During 1969, only fourteen of every one hundred children living in families in the United States were members of poor families. By 1983, this ratio had risen to twenty-two out of one hundred. To assess current problems of poverty among children in New England, we analyzed the data appearing on the March 1985 CPS public-use tapes for each of the New England states. Key findings are summarized in tables 11 through 14.

Table 11 presents data on the proportion of New England families containing one or more unmarried children under eighteen years of age. Families are classified by the size of their income relative to the poverty line. Approximately half of all families in New England had one or more children under eighteen years of age in 1984. Families that were poor or near poor were far more likely to have children present in the home.³¹ Approximately five out of every six poor families in New England had one or more unmarried children under eighteen years of age, and over 70 percent of the near poor families had one or more children. Only 45 percent of all families with incomes equal to or greater than 150 percent of the poverty line had children under eighteen.

The incidence of poverty among families in New England is also related to the number of children under eighteen that they contain. Table 12 presents data on the poverty rates of families classified by this statistic. Only 2.6 percent of New England families with no children under eighteen were poor in 1984. The poverty rates of families containing one or two children under eighteen were four to five times higher, namely, 10.5 and 11.7 percent, respectively. The poverty rate among families containing three children under eighteen rose to 13 percent; for families with four children under eighteen it rose to 27 percent; and 42 percent of families with five or more children under eighteen had incomes below the poverty line. Poverty rates among families with children are thus four to sixteen times higher than those of families without children, and the probability of being poor tends to rise with the number of children in the home. While families with a greater number of children are more likely to be poor, the typical poor family in New England contains few children. During March 1985, of all poor families containing one or more children, 73 percent had only one or two children, and 90 percent had three children or less.

Table 12

**1984 Poverty Rates of New England Families
by Number of Children Under 18 in Family**

Number of Children Under 18	Poverty Rate
0	2.6%
1	10.5%
2	11.7%
3	13.1%
4	27.0%
5 or more	42.1%

Table 13

**Distribution of Unmarried New England Children
Under 18 Years of Age, by Size of Family Income
Relative to Poverty Line as of 1984**

Size of Family Income	Number of Children	Percentage of All Children
Less than poverty line	417,100	13.8%
100% to 124% of poverty line	129,800	4.3%
125% to 149% of poverty line	152,900	5.1%
150% of poverty line	2,323,700	76.8%
All families	3,022,600	100.0%

Estimates of the total number of unmarried children under eighteen years of age in New England and their distribution by the size of their family's income relative to the poverty line in 1984 are presented in table 13. Our figures indicate that there were 3.02 million children under eighteen years of age living in New England families in that year. Of this total, 417,000, or 13.8 percent, were living in poor families, and approximately 18 percent were living in poor or near poor families throughout the region. The poverty rate among children is nearly double that for families in New England. Such a high proportion of children living in families with incomes near or below the poverty line should be of major concern to state educators and to employment and training policymakers and administrators. National research has shown that children who live in poor families tend to have more deficient basic skills and fare more poorly in school and that they are more prone to drop out of high school than children who reside in middle- and upper-middle-income families.³² Given the importance of basic skills and formal educational attainment for success in the labor market today, many of the children in poor and near poor families are at high risk of becoming the hard-core unemployed and the poor of tomorrow.

Table 14 shows poverty rates for children under six years of age in New England during 1984, when 17 percent of them lived in poor families, a poverty rate that was 2.3 *times* as high as that for all families in the region during that year.

Table 14

**Percentage of New England Children Under 6 Years
of Age Living in Poor or Near Poor Families as of 1984**

Size of Family Income	Number of Children Under 6	Percentage of All Children Under 6
Less than poverty line	155,300	17.0%
100% to 124% of poverty line	53,300	5.8%
All families	916,100	100.0%

Nearly 23 percent of all children under six in New England were living in poor or near poor families during 1984. The continuing shift in the region's poverty population toward single-parent families headed by women between the ages of twenty-five and forty-four has increased the likelihood of poverty families having one or more dependent children under eighteen, which in turn has increased the probability that children overall will be members of poor families. The feminization of poverty and the rise in the poverty rate among children are closely related phenomena. Efforts to reduce the number of poor children must, therefore, go hand in hand with efforts to reduce the number of poor female-headed families. Current and future poverty problems are probably more closely linked in 1985 than they have been at any time during the past twenty years.

The Size of the Poverty Deficits Among New England Families

In analyzing the problems of poverty among families in our region, we have so far concentrated our efforts on identifying the number and characteristics of families whose cash incomes fall below the poverty line. Not all poor families will find themselves in similar economic circumstances. Some will find themselves with an income quite close to the poverty line, while the income of others will fall well below it. To determine the income position of poor families in New England and their size in comparison to the poverty line, we calculated the mean absolute and relative size of their income deficits during 1984 and compared these findings to those for the nation as a whole during the same time period.³³

The *absolute size of the income deficit* of a poverty family was calculated by subtracting its actual total cash income during calendar year 1984 from the poverty line for a family of its given size for the same year. We then divided the absolute size of the income deficit by the appropriate poverty line for that family to determine the *relative size of the income deficit*. This measure simply represents the size of the income deficit as a percentage of the poverty line. If the relative size of the income deficit is calculated to be 30 percent, this implies that the family's total cash income fell short of the official poverty line by 30 percent. Our estimates of the mean relative size of the income deficits of poverty families in New England are presented in table 15, on page 24.

The mean relative size of the income deficit for all poor families in the region was 36.4 percent and tended to vary by type of family. Married couple families in New England experienced lower mean relative income deficits than families headed by female householders with no husband present. The mean relative size of the income deficits for these two groups was 29.7 and 38.7 percent, respectively. This statistic also varied by the race/ethnic group of the family head, ranging from a low of 33.4 percent for white non-Hispanics to a high of 48.1 percent for Hispanics. Those groups with the higher family poverty rates also encountered the highest mean relative income deficits.

Estimates of the mean sizes of the income deficits of poor families in New England and the nation during calendar year 1984 are presented in table 16, also on page 24. The mean size of the income deficits of poor families in New England and the nation in that year was \$3,371 and \$4,141, respectively. The

Table 15

Mean Size of Income Deficits as Percentage of Poverty Line by Type of Family and Race/Ethnic Group of Family Head in New England as of 1984

Family Group	Mean Relative Size of Income Deficit
All Families	36.4%
Married-Couple Families	29.7%
Families Headed by Female Householder, No Husband Present	38.7%
Race/Ethnic Group of Family Head	
White non-Hispanic	33.4%
Black non-Hispanic	36.2%
Hispanic	48.1%

Table 16

Mean Size of Income Deficits of Poor Families in the U.S. and New England as of 1984

Geographic Area	Mean Deficit
U.S.	\$4,141
New England	\$3,371
New England as a % of U.S.	81.4%

mean size of the income deficit for poor families throughout the region was below that of the nation by nearly 19 percent, indicating that poor families in New England are slightly less disadvantaged than their poor counterparts throughout the country. At the same time, it must be recognized that the estimated cost of living in metropolitan New England is higher than in other major metropolitan areas throughout the nation. While current data on regional cost-of-living differences are not available, data for the early 1980s on the income needed by families to achieve a “lower standard of living” indicated that a four-person family in the Boston metropolitan area would need approximately 6.4 percent more income than its typical counterpart in other metropolitan areas throughout the nation.³⁴

Data on the mean size of the income deficits of poor families in New England and the nation and their size relative to the mean incomes of all families in 1984 are presented in table 17. We have estimated the mean income deficit of poor families in New England to be equivalent to 9.5 percent of the mean income of all families in the region. This ratio is nearly 30 percent less than that prevailing for poverty families throughout the nation (13.3 percent) during 1984. Mean

Table 17

**Mean Income Deficits, Mean Family Incomes and
Mean Deficits as a Percentage of Mean Incomes
in the U.S. and New England as of 1984**

Geographic Area	Mean Income Deficit	Mean Family Income	Mean Deficit as Percentage of Mean Income
U.S.	\$4,141	\$31,052	13.3%
New England	\$3,371	\$35,402	9.5%

income deficits of poor families in New England are not only lower in absolute dollar terms than those for the nation, but they also represent a smaller percentage of the mean incomes of all New England families.

Estimates of the total dollar size of the income deficits of poor families in the nation and New England during 1984 and their percentage share of the total cash incomes of all families are presented in table 18. The size of the total income deficits of poor families is dependent on both the mean size of their income deficit and the total number of poor families in the area being analyzed. Given our previous findings that (1) mean incomes of New England families are above those of U.S. families, (2) the incidence of poverty among New England families is lower than that of families throughout the nation, and (3) the mean income deficit of poor families in New England is lower than that of all poor families throughout the nation, the total income deficit of all poor New England families must represent a lower share of the total incomes of all families in the region than is true for the nation. The findings in table 18 indicate quite clearly that this is the case.

Our estimate of the total income deficit of poor New England families during 1984 is \$833 million. This figure represents the total amount of income that would have to be received by poverty families to enable them to achieve a level of income exactly equal to the poverty threshold for their family size. The estimated total income deficit of all poor families in New England during 1984 is equal to only .7 percent of the total incomes of all families in the region during that year. This percentage figure is below that for the region during 1979, when the total income deficit was estimated to be nearly 1.0 percent, and is less than

Table 18

**Estimates of the Total Income Deficits of
Poor Families and Total Cash Incomes of All Families
in the U.S. and New England as of 1984**

Geographic Area	Total Income Deficit	Total Family Incomes	Poverty Deficit as Percentage of Total Family Incomes
U.S.	\$30 billion	\$1.947 trillion	1.5%
New England	\$833 million	\$119.4 billion	.7%

one-half of the relative size of the income deficit for the nation during 1984. The elimination of poverty among families in New England is within greater reach today than at any time in the past fifteen years.

The estimated size of the total income deficit for poor families in New England should *not* be interpreted as the minimum amount of income transfers needed to eliminate poverty among families in our region. Most transfers of income are not costless to society.³⁵ Increases in transfer incomes relative to wage and salary earnings could be expected to adversely affect the work incentives of some portion of those poor family heads and their dependents who are currently employed, as well as the work incentives of those near poor persons who are working but earning an amount close to the poverty line.³⁶ As noted earlier in this article, the vast majority of poor family heads in New England are in the prime working-age group, and, though many of them encounter multidimensional problems in securing employment that is competitive with public assistance payments, we believe that a comprehensive array of education, training, and support services, combined with improved economic incentives to work, can contribute to a major reduction in poverty through increasing the earnings of poor family members. In a near full employment environment, expansion of job opportunities for poor family heads can contribute not only to a reduction in poverty but also to an expansion of overall employment, output, and incomes for all New England residents. Displacement effects of job training and placement programs for poor family heads will be minimal in a full employment environment. Antipoverty programs can thus be supportive of economic justice and economic growth goals for the region as a whole. The challenge for economic policymakers in the region is to design and implement such programs and economic incentives in a manner that will simultaneously enhance the employability of the poor and increase their rewards for working instead of simply collecting transfer incomes.

Summary and Conclusions

This report has provided a description and detailed analysis of trends in the size and composition of the family poverty population in New England in the mid-1980s. Our findings have revealed that the strong growth in overall employment opportunities, combined with the sharp drop in the unemployment rate of the region and new employment and training initiatives aimed at the dependent poor, has prevented the poverty rate from rising, in contrast to the trend in the nation as a whole. While the overall family poverty rate has not declined, a number of changes have occurred in the composition of the poor. Husband-wife families, white families, and multiple-earner families currently are characterized by the lowest rates of poverty, and a number of states in the region have come fairly close to eliminating poverty among husband-wife families and multiple-earner families. On the negative side, family poverty has become more concentrated among single-parent, female-headed families, among blacks and Hispanics, and among the dependent poor. The feminization of poverty has increased far more rapidly in the region—particularly in Massachusetts—than in the United States in general, and accompanying this trend has been an increase in the share of the region's poverty population accounted for by children under the age of eighteen.

Poverty problems in New England clearly appear to have become more “struc-

tural" over the past fifteen years, and future economic growth by itself cannot be counted on to generate major reductions in the size of the family poverty population. Yet it must also be recognized that the majority of the heads of poor families in our region are within the prime working-age group, and many of them can be educated and trained to fill existing and future jobs in the New England economy. Existing employment and training programs, such as JTPA Title II-A programs, the ET Choices program in Massachusetts, and other Welfare Demonstration programs in the region; Job Service placement activities; and the education and training efforts of community colleges, vocational schools, and community-based organizations can play a key role in providing a transition for many of the dependent poor into jobs in the unsubsidized labor markets of New England. Greater coordination of existing services and a more structured delivery system for the poor are clearly needed.

Matthew may remind us that "you have the poor among you always";³⁷ however, there is no known economic or social law that should prevent the New England region from achieving further reductions in the number of poor families. As Michael Harrington has remarked in *The New American Poverty*, his recently updated volume on poverty in America, "The most basic single point in this book is that, if the new poverty is so much more intransigent than the old, it is *not a fate*. The structures of this misery were created by men and women; they can be changed by men and women."³⁸ Such remarks seem to be more relevant to New England in the mid-eighties than at any time in the previous fifteen years. 🐼

Notes

1. See "Business Fads," *Business Week* (20 January 1986); and Philip L. Rones, "An Analysis of Regional Employment Growth, 1973-85," *Monthly Labor Review* (July 1986): 3-14.
2. For a more comprehensive review of employment and unemployment trends in the New England economy, see Paul Harrington and Andrew Sum, *The Impact of a Near Full Employment Economy on the Structure of Unemployment and Poverty Problems in New England*, report prepared for the New England Regional Office, Employment and Training Administration, Boston, 1986; idem, "Employment and Unemployment in the Near Full Employment Economy of New England," *New England Economic Monitor* 1, no. 1 (September 1986).
3. For a more detailed review of recent trends in the incomes of families in Massachusetts and the other New England states, see Andrew Sum and Paul Harrington, *The Shrinking of Family Poverty in Massachusetts*, Massachusetts Division of Employment Security (Boston, 1986).
4. For a discussion of the factors producing differences between growth trends in per capita incomes and mean family incomes, see Paul Ryscavage, "Reconciling Divergent Trends in Real Income," *Monthly Labor Review* (July 1986): 24-29.
5. The exact words of President Roosevelt on this topic in October 1937 were as follows: "The test of our progress is not whether we add more to the abundance of those who have much; it is whether we provide enough for those who have too little." For a recent discussion of social programs in the 1980s, see Sar Levitan and Clifford M. Johnson, *Beyond the Safety Net* (Cambridge, Mass.: Ballinger Publishing Co., 1984).
6. For a review of the methodologies involved in developing the poverty lines for families of varying sizes, see Mollie Orshansky, "How Poverty Is Measured," *Monthly Labor Review* 92 (May 1969): 37-41. Discussions of the adequacy of existing poverty guidelines and of alternative methods for measuring poverty can be found in the following publications: Michael Harrington, *The New*

American Poverty (New York: Holt, Rinehart, and Winston, 1984); Greg J. Duncan, *Years of Poverty, Years of Plenty* (Ann Arbor: Institute for Social Research, University of Michigan, 1984); and Robert D. Plotnick and Felicity Skidmore, *Progress Against Poverty: A Review of the 1964-74 Period* (New York: Academic Press, 1975).

7. Families that are poor in New England have cash incomes *below* the poverty lines appearing in table 2; thus, the ratio of their actual income to the median income of families of similar size will be less than the percentage appearing in column C.
8. The number of completed interviews with families ranged from a high of 1,321 families, in Massachusetts, to a low of 365 families, in Vermont. The average sampling ratio for all families was one interview per 982 families. The sample data of each state were weighted to generate region population estimates.
9. Quite similar trends occurred for poverty rates among all persons in New England and the nation during the 1970s. For a review of the Massachusetts experience, see Manuel Carbello and Mary Jo Bane, eds., *The State and the Poor in the 1980's* (Boston: Auburn House Publishing Co., 1984), 1-8.
10. See Ronces, "An Analysis of Regional Employment Growth, 1973-85," 7, 10.
11. Given the size of the sample of families interviewed throughout the region during 1984, a decline of only .11 in the poverty rate would not be considered statistically significant.
12. The view that strong economic growth and accompanying full employment in labor markets would push down the poverty rate of the nation is known as the "trickle-down" theory. This theory clearly applies to New England; however, it seems to more forcefully apply to families with husband and wife present. For a review of trickle-down theories and their validity, see W. H. Locke Anderson, "Trickling Down: The Relationship Between Economic Growth and the Extent of Poverty Among American Families," *Quarterly Journal of Economics* 78, no. 4 (November 1964): 511-24; Lloyd D. Bender, Bernal L. Green, and Rex R. Campbell, "A Case Study: Trickle-Down and Leakage in the War on Poverty," *Growth and Change* 2, no. 4 (October 1971): 34-41; and Richard F. Bieker, "Can Private Sector Jobs Reduce Welfare Dependency?" *Growth and Change* (April 1982): 2-9.
13. For a discussion of the feminization of poverty in the United States, see the National Advisory Council on Economic Opportunity, "Women in Poverty," *Economic Development and Law Center Report* (July-September 1981): 5-12; and Diana M. Pearce, "The Feminization of Ghetto Poverty," *Society* 21, no. 1 (November-December 1983): 70-74.
14. For a review of recent national trends on the feminization of poverty which highlights the less accelerated trend for the nation, see Victor Fuchs, *Poverty and Women*, National Bureau of Economic Research (Cambridge, Mass., 1986).
15. The term *labor force* refers to persons officially classified as either employed or unemployed by the U.S. Bureau of Labor Statistics (BLS) in the Current Population Survey. A person who has had no such labor force experience at any time in a given year is classified as having no recent attachment.
16. This growing problem of the dependent poor has been recognized by Michael Harrington in his recent volume on poverty in America, *The New American Poverty*. See page 33.
17. Data on the annual average civilian labor force participation rates of persons (sixteen and older) in New England during 1985 were obtained from unpublished sources provided by the Bureau of Labor Statistics. These data will be found in the BLS publication titled *Geographic Profile of Employment and Unemployment, 1985*.
18. See Andrew Sum and Katherine Mazzeo, *Trends in the Money Incomes and Poverty Status of Massachusetts Families, 1969-1975: Implications for Targeting CETA-Related Employment and Training Programs*, Monograph of the Massachusetts Department of Manpower Development (Boston, 1978).
19. See U.S. Department of Commerce, Bureau of the Census, *1980 Census of Population, General Social and Economic Characteristics* (Washington, D.C.: U.S. Government Printing Office, 1983).

Separate volumes are published for each New England state.

20. Daniel Patrick Moynihan, "We Can't Avoid Family Policy Much Longer," *Challenge* (September-October 1985): 9-17.
21. The estimated unemployment rate of poor family heads was overwhelmingly larger than that for nonpoor family heads. At the time of the March 1985 CPS survey, the unemployment rate of nonpoor family heads was only one-seventh as high as that of poor family heads.
22. ET Choices is a welfare demonstration program operated statewide in Massachusetts. It is intended to improve the employability and earnings of AFDC recipients and thereby reduce their welfare dependency. A diverse array of services are provided to program participants, including child care, job search assistance, remedial education, occupational training, and other job training. Smaller-scale demonstration programs, serving AFDC recipients, are also operating in four other New England states. Supported Work programs are intensive, high-support, subsidized work experience programs for welfare recipients and other at-risk groups. They are intended to enable participants to make the transition into unsubsidized jobs in both the private and public sectors of the economy. Title II-A Job Training Partnership Act (JTPA) programs are employment and training programs that are funded by the U.S. Department of Labor. They are aimed at economically disadvantaged adults and youth and are designed to provide job placement, remedial education, and occupational training to improve long-term employability and earnings. Job Service labor exchange activities are job placement and job development programs designed to place the job-ready into existing positions in state and local labor markets. State and local housing authorities in New England also operate remedial education and vocational training programs for unemployed and underemployed residents of public housing projects.
23. One exception is that of Project Redirection. For a review of the goals, design, and outcomes of such programs for teenage parents, see Janet C. Quint and James A. Riccio, *The Challenge of Serving Pregnant and Parenting Teens*, Monograph of the Manpower Demonstration Research Corporation, New York, April 1985.
24. Data on the 1979 poverty rates of families in New England by race/ethnic group are based upon the findings of the 1980 decennial Census. See U.S. Department of Commerce, Bureau of the Census, *1980 Census of Population, General Social and Economic Characteristics*, tables 82 and 104.
25. For a more detailed review of changes in median incomes of white and black families in Massachusetts between 1979 and 1984, see Sum and Harrington, *The Shrinking of Family Poverty in Massachusetts*.
26. Senator Moynihan's views on the objectives and desired characteristics of such a family policy were discussed in his Godkin Lectures at Harvard University in the spring of 1985. See Daniel Moynihan, *Family and Nation*, unpublished lecture notes, 1985, and idem., *Family and Nation* (New York: Harcourt, Brace, and Jovanovich, 1986).
27. Sum and Harrington, *The Shrinking of Family Poverty in Massachusetts*, 30-35.
28. Joseph D. Mooney, "Urban Poverty and Labor Force Participation," *American Economic Review* (March 1967): 104-19.
29. A full employment economy can also assist one-earner families to escape from poverty by raising real hourly wages on existing jobs and increasing promotion opportunities for workers. During the past few years, average hourly earnings of production workers in New England manufacturing industries have been rising relative to the same for their counterparts throughout the nation. For a more detailed analysis of the relationships between income inadequacy and employment and earnings experiences of workers in New England, see Andrew M. Sum and Edward M. Meehan, "The Economically Disadvantaged in New England," *New England Journal of Employment and Training* 1, no. 1 (Winter 1981): 23-53.
30. Cheryl C. Sullivan, "Welfare: Poverty and Children—New Doubts About the System," *Christian Science Monitor*, 27 September 1985; Daniel Moynihan, *Family and Nation*; and *Poverty Among Children in the U.S.*, Library of Congress, Congressional Research Service Monograph (Washington, D.C., 1985).

31. The term "near poor" has traditionally been used to represent those families whose incomes are above the official poverty line but do not exceed 125 percent of the poverty line for their family size.
32. Jerald G. Bachman et al., *Adolescence to Adulthood: Change and Stability in the Lives of Young Men*, Institute for Social Research, University of Michigan (Ann Arbor, 1978); Heather L. Ross and Isabel V. Sawhill, *Time of Transition: The Growth of Families Headed by Women*, The Urban Institute (Washington, D.C., 1975); and Andrew Sum and Paul Harrington, *Basic Skills of America's Youth: Findings of the 1984 National AFQT Test Administration*, a report prepared for the Ford Foundation, New York, 1985, available from the Center for Labor Market Studies, Northeastern University.
33. The rationale for analyzing the size of the income deficits of poor families, along with the findings of previous analyses of the income deficits of the poverty population in the United States during the early 1970s, is presented in Robert D. Plotnick and Felicity Skidmore, *Progress Against Poverty*. See pages 39 and 40.
34. The Bureau of Labor Statistics has discontinued the collection of data on family living standards. The last year for which such data were collected was 1981. The U.S. Department of Labor has updated these family income data to 1984 by applying changes in the CPI to the 1981 data. See "Lower Living Standard Income Level to Be Used for Determining Economic Disadvantage for JTPA Purposes," *Federal Register* (8 August 1984).
35. Public assistance payments are regarded as transfer payments by economists and often are considered to impose no real resource cost in many benefit-cost studies. This assumption is clearly inappropriate for many of the New England poor. If work incentives were diminished, the reduction in labor supply would clearly lead to reduced employment and incomes for all residents.
36. For a review of the findings on the impact of previous income guarantees on work incentives and of taxes on labor supply decisions of households, see Robert Ferber and Werner Z. Hirsch, *Social Experimentation and Economic Policy* (Cambridge: Cambridge University Press, 1982); "Implications of a Negative Income Tax: A Series of Papers on Income Maintenance Experiments," *Journal of Human Resources* (Fall 1980); and Barry Bosworth, *Tax Incentives and Economic Growth*, Brookings Institution (Washington, D.C., 1984).
37. Matthew 26:11, *New English Bible* (New York: Cambridge University Press, 1971).
38. Harrington, *The New American Poverty*.

Managing Change: Reflections on Innovation in the Public Sector

Ira A. Jackson and Jane P. O'Hern

In January 1983, when Governor Michael S. Dukakis appointed Ira Jackson as commissioner of revenue, the Commonwealth of Massachusetts was facing an estimated \$300 million deficit. The state was also suffering from a severe loss of public confidence in the integrity of its tax administration. His first and most urgent priority being the restoration of that confidence, Commissioner Jackson implemented a three-part strategy to improve voluntary compliance with the tax laws: raising the stakes for evaders, treating honest taxpayers as customers rather than victims, and changing public attitudes about tax evasion. Productivity gains and innovative procedures at the Department of Revenue are illustrative of this plan's success: the dollar value of audits conducted and delinquent taxes collected has tripled; a visible and vigorous seizure and criminal prosecution program has been instituted; and a highly effective tax amnesty program that generated \$86 million has been completed. Since Jackson's appointment, annual revenue collections overall have risen 60 percent, without any broad-based tax increases. This article tells the story of change at the Department of Revenue and suggests generic principles that may be inferred from the experience.

The country needs and . . . the country demands bold, persistent experimentation. It is common sense to take a method and try it: If it fails, admit it frankly and try another. But above all, try something.

—Franklin Delano Roosevelt

Public-sector managers struggle with a unique set of challenges. Especially in large agencies, they are frequently confronted with entrenchment, information mongering, poor employee morale (with few meaningful and tangible opportunities to improve it), and a sometimes perverse set of external incentives that reward crisis (at least with attention), engender mediocrity, and hinder excellence. Just as often, the mission of the agency is unclear, which makes successful accomplishments difficult, if not impossible, to discern. Most of the organization is involved in routine tasks which vary little day in and day out, which haven't

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been altered substantially this side of the twentieth century, and which may have long ceased truly to serve the public.

This is the story of one public agency, the Massachusetts Department of Revenue (DOR), whose dramatic problems provided an opportunity for equally dramatic change—with tangible and measurable results. The story is intended to provide a backdrop for a few reflections about what has worked and a few confessions about what hasn't. Although the jury is still out on the long-term implications of the changes that have taken place, experience so far may provide food for thought or fodder for debate. At the very least, it will offer a firsthand perspective on risk taking and substantial organizational change.

Welcome to the Department of Revenue

In January of 1983, the employees of DOR were just past a traumatic election campaign in which public perception of corruption in the agency had become a central issue. A high-level and much revered deputy had committed suicide, and several employees had been indicted. The incumbent governor was defeated by Michael S. Dukakis, who announced, as his first postelection action, the appointment of a blue-ribbon commission whose task was to thoroughly analyze the entire range of DOR operations and to make recommendations for change.¹

Allegations of misconduct, alas, are not uncommon with respect to tax agencies. Even the Internal Revenue Service, now renowned for its integrity, was the target of a major corruption investigation in the 1950s.² In agencies responsible for the collection of massive amounts of revenue—DOR collects about \$7 billion annually, or \$30 million a day—there is a great deal of discretion for staff in administrative functions and, consequently, inherent opportunity for wrongdoing. Yet as recently as 1983, no meaningful internal guidelines and procedures were in place at DOR to ensure the integrity of employees. Also lacking were routine mechanisms such as annual tax-filing checks on employees or criminal background checks prior to hiring to guarantee the most basic standards of conduct. As a result, allegations were difficult to dispute; and the lack of internal controls made the agency extremely vulnerable to charges of corruption. Whether such charges were founded in reality was almost beside the point; little hard evidence could be offered to the contrary. A serious crisis of public confidence in the integrity of DOR had developed—and had to be urgently addressed.

One obvious result of all this was a highly demoralized work force. Even the most insulated employee was affected by the public perception of corruption and misconduct. Back in January 1983, DOR workers reported that it was an average occurrence for them to encounter cynical comments or at least to imagine they were the recipients of insults from neighbors when shopping at the local store. "Help give us back our pride," was the oft-heard refrain of many career employees when they were asked what could be done to help them.

The consequences of public perception of misconduct went beyond severely impaired employee morale. In a tax department, the vast bulk of collections is dependent upon the citizenry's willingness to comply voluntarily with the law. In fact, the collection of taxes is the one function of government which both financially and intimately affects each and every adult citizen each and every year. A good case could be made for the thesis that the competence, honesty, and fairness with which a government taxes its citizens is a fundamental measure of the

degree to which it upholds the public trust, and it follows that the public is not likely to be honest in its financial declarations or tax payments if the agency that handles those transactions is itself perceived to be exploiting taxpayer dollars.

It wasn't surprising, then, in 1983, that revenue collections in Massachusetts hadn't kept pace for four years running with the growth in the state's personal income. In two of those years, revenue growth had not even kept pace with inflation. Clearly, ever larger amounts of tax payments were being evaded annually by people who either didn't take the system seriously or were cynical about just who would get to use any tax dollars they did pay, or both.

Added to this were predictions that the Commonwealth was embarking upon hard times, with a \$300 million revenue shortfall forecast for the fiscal year as we entered its final half in January of 1983. It all indicated either an opportunity to build internal and external constituencies for change or—to pessimistically inclined minds—a fast track to disaster.

What to Do?

A few days into the month of January 1983, Governor Dukakis appointed as commissioner of revenue a man who was leaving behind a reasonably challenging yet certainly more rational job as associate dean of the John F. Kennedy School of Government at Harvard. A commissioner who didn't belong to the Bar and who had literally no formal tax training was unheard of in the Commonwealth. The appointment was precedent setting and carried political risk for the governor. The opinions of the new commissioner's Harvard associates ran a common course: some argued that it was a no-win job, others that it was too routine and bureaucratic, with little or no room for innovation or policy impact.

In fact, DOR in January of 1983 presented a wide range of opportunities. Given the events of the time, it was poised for radical organizational change; and because of fiscal pressures, the potential for developing external allies was there. All that was required was the conviction that most people—in this case, the two thousand employees of DOR—want to do, and will do, a good job if management provides them with the strategy, resources, and power to get it done.

Working from the Outside In

Most public managers focus on what they believe they can control—hiring, firing (not much firing in a union/civil service environment), organizational structure, and internal performance targets. Owing to the nature of the tax business and to the crisis of public confidence, taking steps to alter the outside world's view of the department seemed an equally important key to positive change in the first months of 1983.

It began with the Governor's Advisory Task Force on the Department of Revenue, the blue-ribbon commission appointed by Governor Dukakis and chaired by Professor Paul McDaniel, a noted tax authority at Boston College Law School. There was every likelihood that the relationship between the McDaniel Commission (the alternative name for the task force) and DOR management would be strained. Certainly some internal forces would have preferred the final outcome to be an innocuous document that would collect dust in the statehouse library,

as so many previous task force reports had; others on the inside feared that the task force would further denigrate DOR by exposing systemic failings and justifying the previous allegations of individual wrongdoing.

We took a different approach to the commission.³ We supported and encouraged its presence and worked to broaden its staffing so that pro bono participants from some of the most well-known accounting firms would be included. We then considered the commission the equivalent of our own, even if independent, high-priced consultants and placed our confidence in it to diagnose and articulate our problems and prescribe their solutions.

Six months later, the task force did just that. Its final report was a fifty-six-point agenda for making changes over a five-year period.⁴ This report became our own version of a business plan—one that we hoped would channel our energies and that we expected to be held accountable for pursuing. We also hoped our own version of venture capitalists in the public sector—the governor, the legislature, the media, fiscal watchdog groups, leadership councils, and others—would invest in the plan because of the dramatic return that was forecast if resources were committed and changes were made.

The process for compiling the report was key: task force members were given open access to DOR, and high-level managers took the opportunity to volunteer suggestions for improvements. The report became a bible for change at DOR and was distributed widely to the legislature, the governor's office, area business groups, and virtually anyone who expressed an interest in positive change at DOR. It became the vehicle for building the popular support required for some of the legislative alterations and for obtaining the necessary appropriations.

Long before the appearance of the final report, we had used the task force process to help develop a legislative package of changes that would assist DOR in administering and enforcing the tax laws and that would be responsive to the governor's desire to crack down more effectively on tax evaders and delinquents, thereby eliminating the need for either tax rate increases or draconian budget cuts. We organized a brainstorming session to bring forth a host of sundry ideas, the "what if we could" notions that had been incubating at DOR for years. Some of these ideas, in fact, had been incorporated in previous DOR legislative packages that had simply not gotten the top-level support they deserved.⁵ Other ideas were more "blue sky," but all of them were the result of a quick but concentrated collaboration between the old-timers and the newcomers, and the results were suggestive of how a working partnership between these two groups could yield synergistic results greater than the proverbial sum of the parts. Dan Breen, the state's veteran revenue estimator—a wise craftsman with decades of experience in the business—chaired the brainstorming group, and Nick Metaxas, general counsel to the commissioner and the most skilled legislative draftsman in state government, translated the ideas into legislation.

We presented the final product—an omnibus 101-section bill—to the governor and his secretary of administration and finance, Frank Keefe. It was accompanied by a request for a supplemental budget that would substantially increase our auditing staff as well as resources for computers. We called the overall package the Governor's Revenue Enforcement and Protection Program—REAP, for short—and gave our best estimate of the additional revenue it would allow us to bring in for the Commonwealth.

To our great good fortune, executive support from the highest level was never in question. The governor himself submitted our proposal and request to the legislature. He steadfastly backed our ambitious revenue commitment in the face of countless cynics, and Secretary Keefe was also a courageous believer from the outset.⁶

Among the provisions of REAP were tax law changes ranging from the remedial to the radical. In the latter category, REAP gave us the authority to revoke the business and professional licenses of over a million individuals and corporate taxpayers if they failed to meet their state tax obligations. A similar provision allowed the nonrenewal of any of the \$2 billion worth of state and local contracts with 225,000 vendors for the same failing. On the remedial side, tax evasion became a felony in Massachusetts, with sharply increased penalties attached. In the past it had been only a misdemeanor—and one that the courts did not take seriously. Interest on delinquent accounts would rise to 18 percent; we were authorized to contract with private collection agencies; and a provisional tax amnesty was authorized (a friendly legislative amendment, incidentally, that the administration was happy to embrace).

Because of the predicted \$300 million revenue shortfall facing the Commonwealth, it occurred to us that many public interest groups—to whom the funding of programs was of vital importance—had a stake in our successfully collecting revenue that was due but not paid. Human services advocates had to choose between witnessing painful budget cuts to their programs and joining the bandwagon. And the legislature saw the potential to avoid difficult program-cut or tax-hike decisions by going for a promised \$10 to \$1 return on a DOR budget investment.

Still, most people—both in government and in the public—were unconvinced in the absence of evidence to the contrary that investing additional resources in DOR would not be sending good money after bad. And the public, in particular, was wary of additional authority being placed in the hands of employees whose integrity it found suspect.

So we began with the most basic programs to restore public confidence. First, we conducted tax and criminal record checks of existing employees and put a system in place to ensure that those checks would be made in advance on new hires. What we found was reassuring almost without exception. We also moved quickly and publicly to discipline that small fraction of our employees who had not met the threshold tests of integrity. In a few unfortunate cases, employees were terminated.

More substantive assurances of integrity were delivered with the creation of a Division of Inspectional Services, modeled after a similar function at the IRS. Here we established two new bureaus to protect employees from external corruption and to audit the integrity of internal accounting systems on an ongoing, in-depth basis. In charge of the division was Tom Herman, first deputy commissioner, who had left the law firm of Hale and Dorr to become central partner and “number two” at DOR in January. He worked with the task force to assess the integrity needs of DOR and recruited the right managers and staff to implement the new functions.

At the same time, we elevated the importance of the personnel function in the department and created a new Division of Human Resources Management. Tom

Fitzpatrick, with a strong private-sector consulting background in the field, was recruited as the first deputy commissioner for human resources. He began to build a formal Training Bureau where there had been none, as well as an Affirmative Action office and support functions to provide employees with the tools they needed to do their job professionally.

In the course of these actions, we spread the story to anyone who would listen while also looking hard for opportunities to bring our enforcement efforts to the attention of the public. The great majority of tax law enforcement is conducted under the veil of confidentiality, but some provisions enabled us to pursue evaders in broad daylight and to encourage the media to report on what we were doing.

The law allowed us to publish the names of all tax delinquents who owed over \$5000, and we did so, with full coverage of the lists in local papers. Seizure of the property of egregious delinquents was another existing enforcement option that the department had rarely utilized. We began employing this tool, with a special emphasis on businesses that collected "trustee taxes," such as sales and withholding taxes, and then failed to turn the money over to the state. We also conducted a special project to locate boats whose owners, through sophisticated corporate arrangements, had avoided paying the sales or use tax. Ten of the owners who didn't take notices to pay seriously had their yachts seized in the summer of 1983.

Finally, as these tougher new laws were enacted, we offered a last window of opportunity for both tax delinquents and outright evaders: an amnesty period, during which criminal immunity was promised and civil penalties were waived. Over \$86 million and fifty-two thousand forgiven taxpayers later, we had exceeded by four times the revenue estimates of the department's wildest optimists. With the amnesty and other enforcement initiatives, we also collected far more than the original revenue estimates for the entire REAP program.

Best of all, the public was beginning to view DOR in a different light. People appreciated stirring examples of selected, symbolic actions against flagrant evaders. A sense of justice was awakened. The public began to understand that the enemy was not the tax collector but the tax evader, that the majority was being cheated by a minority, and that tax evasion was not a harmless and socially acceptable quirk but a serious crime. To emphasize the last point, a prior study on tax evasion in Massachusetts was updated, improved with research from other states, then widely publicized.⁷ The study's new evasion total of \$640 million annually—12 percent of collections at the time—was probably conservative, but it was still a shocker. It certainly provided a fiscal incentive to support DOR initiatives. In a series of contemporaneous actions, we published our tax evasion estimate, made public the list of delinquents, and stepped up our seizure program. These initiatives worked to overcome legislative inertia and convinced unlikely allies to back us.

Riding the White Horse

The McDaniel Commission confirmed a growing conviction that the first and foremost item on the DOR agenda should be changing the public's perception of the agency's integrity, or lack thereof. First off, under Tom Herman's leadership,

we altered the realities of integrity controls and systems. We publicized as widely as possible both the new systems and the high caliber of the new managers recruited to direct them. We also moved to build a constituency within the public sector to work in partnership with DOR against tax evasion. But at the same time, internal measures were required to ensure that public mistrust was not based on reality.

Three considerations guided initial management actions to ensure internal integrity.

First, like many large public agencies, DOR is a bureaucratic factory. Nearly two thousand people show up for work every day in fifteen locations in the state and five other locations around the country that provide audit coverage of larger, multinational corporations with offices in Massachusetts. Some 20 million financial transactions occur annually; our computer runs twenty-four hours a day. Several thousand taxpayers call or walk in daily, expecting to receive assistance—thousands more in the peak filing season. Obviously, the new commissioner did not have the option of calling a halt to all activity and personally reviewing the deposit of every check or the conduct of every audit.

Second, much of the routine work at DOR was conducted without the benefit of explicit procedures. Work routines were basically idiosyncratic and somewhat tailored to fit individuals' or specific managers' styles. There were no generic mechanisms that could be placed on automatic pilot while spring housecleaning took place at DOR. Even if a massive purge of top management had been indicated, it would have been impossible to enact.

Finally, as noted before, the agency as a whole was demoralized and traumatized at the start, in January 1983. A positive message from the top was imperative to encourage the honest employees who, in the face of blanket indictments against DOR, had been giving their all to their not particularly exciting or well-compensated jobs.

Our filing and background checks had shown that all but a tiny fraction of employees had been faithful in meeting their tax obligations. A slightly larger number had past criminal records, and employees who had lied about those records or who had committed past offenses that might compromise their Department of Revenue duties were discharged. The new Inspectional Services function provided the capacity to move beyond basic character checks to thorough investigations of specific allegations. The goal was to create an "integrity presence" throughout the agency. In brief, we came to view our key internal management challenges as (1) the setting of a tone and a context which would allow the bulk of honest employees to make their best contribution to the agency from a position of pride, and (2) the provision of protection against those few corruptors from within who might otherwise try to drag their honest coworkers down.

The troops needed positive messages, and they got them. Every employee received a letter soon after January 1983 with assurances that the new commissioner was aware and supportive of staff efforts. Visits by the commissioner to various areas of the organization and talks with employees about their concerns and suggestions became a daily routine. In many areas and offices, employees reported that no commissioner had ever visited before. With additional funding we began to improve working environments. The first efforts were marginal—the addition of a water cooler here, a new filing cabinet or fan there, and new and

more comfortable chairs for the several hundred employees who prescreen and sort income tax returns. In time, the physical improvement involved the renovation of whole areas and the relocation of many crowded offices to new, more spacious, and thoroughly professional quarters.

On the other hand, previously rubber-stamped appointments, contracts, and recommendations were sent back for analysis and explanation, and top managers with substantial authority were held to the highest possible standards of performance. New rules were established for the massive bulk of correspondence written directly by taxpayers to the commissioner. Managers had to have a response prepared for the commissioner's signature rather than merely pass off—or potentially bury—the problem. This gave the commissioner an opportunity to identify systemic problems that taxpayers were encountering and assess the quality of DOR's communication with the public. Frequently, letters were returned for re-drafting, and, more often than not, a revised version arrived on the manager's desk from the commissioner's office to provide an example of more responsive communication. We also instituted an internal management vehicle known around the agency as the "Sunday night memo." A remarkably effective communication sent directly to managers, it was written by the commissioner as he caught up with paperwork and met with staff every Sunday evening.

These sorts of expectations and interventions were new to veteran DOR managers, and the organization was not universally structured to provide anything close to the required level of responsiveness. Virtually no layer of middle management existed between bureau chiefs and their troops (with sometimes more than a hundred employees reporting to a single manager). Tom Fitzpatrick developed a bold strategy for "empowering" career employees through promotions and attracting young talent from the outside. Using our supplemental budget appropriations, and with the support of the task force recommendations behind us, he doubled the number of managers in the agency and created a new level of non-unionized "deputy bureau chiefs" in the major bureaus.

Some of the new positions created new functions and were filled with outside talent. For fully half of the new positions, however, we promoted internally, identifying young and not-so-young talent and competence within each functional area. For many individuals so promoted, it was as if we had unlocked a cage. Employees who knew what the problems were but had not previously been able to tackle them directly were suddenly given the authority to take responsibility for solutions. Scores of employees at the next lower level were inspired to work harder, now that the number of rungs on the DOR career ladder had been doubled and risk taking was finally being rewarded with record-fast promotions to positions of authority and responsibility. Senior management meetings with the commissioner were held every six weeks to ensure communication from the bottom up and the top down.

The organizational purpose of some public-sector agencies has at times become hazy and ambiguous, but within a very brief period, DOR's mission had become quite clear: to collect the taxes due the Commonwealth as firmly, efficiently, and professionally as possible. Quality is typically difficult to measure in agencies that employ large numbers of people to serve the public interest, but countless bottom-line indicators existed at DOR to judge performance. Many of these indicators had never been fully developed or utilized, oddly enough, and

employees' sense of organizational purpose was not nearly as clear as it should have been.

Over time we articulated that mission in simple, understandable terms: honest, fair, and firm administration of the tax laws. We took every opportunity to disseminate that corporate value statement among employees. Staff in the commissioner's office compiled all existing performance data, and managers received graphs accompanied by probing questions or deserved acknowledgements regarding key performance indicators. Microcomputers were procured and training was provided. Also, increasingly sophisticated management-reporting systems were developed for and by operations managers.

With these supports established at least in their preliminary stages, we began a headlong push for change at DOR. The task force had set a long agenda, and we added to that list. A wide range of initiatives and internal improvements were undertaken. The story of two of them may provide some real life examples of change at DOR.

Amnesty

You might as well fall flat on your face as lean over too far backward.

—James Thurber

When the REAP legislative package was put together, the notion of an amnesty—a limited period of time for delinquents and nonfilers to come in, come clear, and avoid both criminal prosecution and penalty charges—was discussed and discarded. Later on in the legislative process, an amnesty period was added to the bill—with little objection but equally little enthusiasm from mainstream DOR.

The idea had been tried before in several states but had met with real success only in Arizona. There the amnesty was tied to a campaign to heighten public awareness of tough new enforcement laws and the costs of tax evasion. In point of fact, no one is ever prosecuted for voluntary disclosure of owed taxes. Criminal cases require a hefty test of willfulness, which cannot be established when a taxpayer is voluntarily complying. Penalty charges are imposed mainly as an incentive to get taxpayers in the door to pay; they are frequently abated if a taxpayer can show just cause or a reasonable excuse. Given these precedents and the fact that the Massachusetts amnesty program would be mandating the payment of a great deal of interest, accrued over all the years the taxes were owed, the idea seemed worth a try—delinquent taxpayers would be spared penalty charges as well as the threat of prosecution but would not be let off the hook for the taxes and interest that they owed.

The official estimate for revenue from the program was \$5 million, with the wildest DOR optimists going out on a limb to predict \$20 million. We were concerned that we would “offer an amnesty” to which no one would come!

Other measures to collect this revenue had been initiated prior to the amnesty. A program of stepped-up seizures against major delinquents had been instituted in the spring of 1983. After that we had begun planning for an even broader civil and criminal enforcement effort. We also developed procedures to run the amnesty program. The statute required that it be held for three months sometime during FY 1984 but left it up to us to determine the actual period. With just one

day's public notice—having made a major effort to impress upon the public our new and tougher approach—we launched the amnesty program on October 17, 1983.

The nuts and bolts management of the Massachusetts amnesty is hardly a story for the textbooks. Because the program was completely new—and because we completely underestimated the public response to it—we established initial procedures for thorough case research which were probably too stringent. We placed the responsibility for running the program in our Enforcement Division and staffed the effort with collectors who had been trained to pursue those who owed us taxes. The collectors knew how to bring in money, but they were not accustomed to providing thorough taxpayer assistance for individuals coming in to file ten years' worth of returns. As a group of employees driven by the bottom line, these folks probably were not the best equipped to guide the program.

In the meantime, we sent hundreds of thousands of notices to taxpayers—individuals and businesses—that we knew were delinquent or that we suspected were nonfilers on the basis of computerized matches with the Internal Revenue Service. The response was overwhelming. On the last day alone of the amnesty, 30,000 taxpayers contacted us, and 10,800 of them walked through the doors of our Boston office to settle up. A long-time veteran of DOR called it “the Boston tea party in reverse.” During the program, countless taxpayers told us that they felt as though a great weight had been lifted from them; they'd gotten into bad tax habits during hard times, they said, and later, when times had improved, they had been afraid to report their income accurately because of inconsistencies in prior years.

Perhaps the best explanation for the success of amnesty programs is a combination of fear, guilt, and gratitude on the part of taxpayers. A sociologist would have a field day analyzing the phenomenon. The success of our program sparked other programs in many states, and several states—notably California, New York, and Illinois—met with success that was equal to or greater than ours. There is something about a second chance that deeply appeals to people. A modicum of common sense and generosity—plus a puckish enthusiasm—is also welcome relief, it seems, from the monotony of bland government and business as usual.

From a management perspective, the most remarkable thing about the amnesty program was its impact on DOR employees. By the time we had collected \$86 million and had handled 120,000 taxpayer contacts, virtually the entire professional staff of the department had become involved. So for starters, it was an initiative that included everyone. Unlike most of the routine work, which had long been separated by function and divvied up into pieces that each bureau owned, the amnesty was everybody's. It was impossible to figure out where to pass the bureaucratic buck if something needed to be done. Obviously, this approach would be inappropriate for the management of ongoing operations, and inevitably, strict project management and delegation of authority were resumed in the aftermath of the amnesty. However, for a few brief and still shining moments, employees were empowered to look around, see what had to be done, and make sure it happened.

More important was the reaction of taxpayers in general and the interaction between DOR and amnesty applicants. Here was a state agency—one that no one

had previously held in very high regard—showing a little compassion and a good measure of common sense. On the last night of the amnesty, we served coffee in the lobby of the department's main building downtown. The atmosphere was a mix of frantic and festive. Because of the remarkable response, the windup of the program received wide coverage from local and even national network news media. In time it became a cause célèbre nationally; even President Reagan acknowledged awareness of the Massachusetts tax amnesty when he was questioned about the concept at a meeting with the nation's governors in Washington.⁸ Where DOR employees had previously avoided inquiries about their jobs, they now found themselves celebrities of the white-hat variety. For individuals who even under the best of circumstances tend to be razed for their profession, it was, to say the least, a rare moment—a happy antidote to the poisoned atmosphere of the not-so-distant past.

The amnesty was not part of any conscious, long-range strategy for morale and team building. It turned into that almost accidentally, and as it evolved, we saw its full worth as an example of what is possible. In a way, it became a foundation for future efforts.

SERVE '85

Next to being shot at and missed, nothing is quite as satisfying as an income tax refund.

—F. J. Raymond

When those of us who are parents draw upon whatever behavioral psychology we have absorbed, we discover that the most effective way to encourage a certain behavior is to reinforce it positively. Unfortunately, almost despite ourselves, we seem to spend most of our time negatively reinforcing the behavior we're trying to eliminate.

It occurred to us in the first few months of 1983 that DOR might similarly have the emphasis on the wrong syllable. Our enforcement programs had improved dramatically. We were making tough decisions and, we hoped, inspiring a little righteous indignation among honest taxpayers in the Commonwealth. We were hammering hard against evaders and delinquents. But meanwhile, we weren't doing much to help the vast majority of those honest taxpayers comply with our laws. And in a system built upon voluntary compliance, it seemed to us that rewarding and reinforcing good behavior was at least as important as getting tough with the bad guys.

The tax forms were incomprehensible (the resident income tax form in use for the previous twenty years won an editorial cartoon award around Oscar time in 1983 for the Best Script in a Foreign Language). Besides being unintelligible, tax forms were often inaccessible. There were very few distribution points around the state. For people who had questions, it was virtually impossible to get through to DOR by phone during the filing season, because the system couldn't handle the volume. At the end of the line, in late July, we generally got around to issuing the last refund checks to taxpayers who had filed on April 15—a wait of twelve to fourteen weeks.

All of these obstacles created disincentives to voluntary compliance for some

2.6 million individuals and families who weren't too thrilled about filing their income taxes to begin with. To the 1.8 million filers who were due a refund, it all added up to more evidence that state government was inefficient, unprofessional, uncompetitive, and oblivious of their needs and concerns. It was almost as though DOR were mimicking big government grown bloated and unchecked: here we were, holding on to \$300 million in overwithheld tax revenues, money that was earning interest for government in the state's coffers instead of being put back into the pockets of taxpayers, where it rightfully belonged.

This was an obvious target for managerial improvement, and we crystallized the concept with a goal: to treat taxpayers as valued customers rather than as victims of an uncaring state bureaucracy. We had developed the "stick" through the use of new REAP powers, such as license revocation and felony convictions, and through more vigorous and visible use of such existing powers as liens, levies, and seizures. All of this was meant to deter evaders and delinquents. And we had appealed to the public "conscience"—through the use of public service announcements and frequent speeches and press conferences, each of which underscored the theme that tax evasion is not a victimless crime—that besides being a violation of the law, it has moral and social consequences.

But now, with an effort designed to reward and reinforce good behavior, we had stumbled upon the third component of a more balanced strategy that combined the stick—the conscience—with the carrot.

We started in the spring of 1983 with the development of a user-friendly income tax form for the majority of taxpayers, who had straightforward and simple income to report, and the product was so easy to use that we labeled it Form ABC. The following year we took a deep breath and tackled our comprehensive and thus far more complicated tax form—the one that had received the editorial award the year before.

The forms had become very complicated in Massachusetts primarily because we have a pretty complicated law, with two rate structures and a variety of provisions that differ from federal tax law. We used the team mechanism to clarify definitions and requirements and to write them in English. Representatives from almost every area of DOR worked on initial revisions, and policy issues were formally settled by a group of senior managers led by the commissioner. Every manager in the organization was asked to review and comment upon drafts before the final copy was sent to the printer.

There is an action-pressing deadline for the production of tax forms: if they aren't ready by January, the consequences are very serious. Using the time frame to push for closure and confront decisions that should have been made much sooner, we got it almost right in January of 1985: tax forms were on the street and in people's mailboxes soon after the New Year. Having discovered the previous year that the availability of forms was not guaranteed even in our own ten district offices around the state, we expanded our distribution (or "marketing") network to include over a thousand post offices, banks, city and town halls, libraries, and IRS offices around Massachusetts.

Our newly revised tax forms employed color and graphics to guide the taxpayer, provided helpful examples for complicated calculations, and even included a page showing how tax dollars are spent. Right on the cover was a pledge from the commissioner to a four-week turnaround for refunds filed early.

Many moving pieces are involved in the refund-processing operation. Almost six hundred workers—half of them seasonal—pick up the mail, open envelopes, sort returns, key information, and correct mathematical errors. Another twenty professionals design processing programs and operate the computer, which in turn batches keyed data in the wee hours of the night and spits out checks on a weekly basis. Coordinated efforts are crucial. If one area doesn't deliver, the system reverberates from the effects for weeks.

We were fortunate in that we had some strong management in key areas and a reasonably loyal seasonal work force, most of whose members returned year after year. Yet we hardly had the kind of state-of-the-art equipment one would expect to find in such a high volume-processing operation, here in the high-tech capital of America. And our data entry operators, while hardworking, had never before been given a purpose beyond completion of the work directly in front of them—or any feedback on how well they were meeting targets assigned by management. With regard to turnaround time for refunds, we had no hard evidence concerning prior performance; but having made the pledge right on the tax forms, to some 3 million households, our mission was clear.

We began by developing a database that would allow us to track the inventory of refund returns. We also used a project management model that subsequently has worked well for a number of priority tasks. We pulled together managers from all the affected areas—from form procurement and distribution to taxpayer assistance and actual processing, and we met every week in the commissioner's office to review performance, resolve any problems still standing in the way, and discuss resource allocation. A new telephone system that monitored incoming calls, call-waiting time, and call-abandonment rates brought bad news: more taxpayers were hanging up than getting through. That information was used to improve distribution of staff and to call in reinforcements from other areas of the department.

At the end of the 1985 filing season we had delivered on our four-week turnaround pledge—with room to spare. We nominated a group of over five hundred DOR workers—including the steering committee managers but largely comprised of clerical employees—for a special statewide performance-recognition award. They won it in a stiff competition, and it was presented by Governor Dukakis at an evening ceremony in a packed hotel ballroom. We called the group SERVE '85—Speedy Efficient Refunds Very Early. A few weeks later we had our own celebration, with a twelve-foot cake in the shape of a refund check. It was served to the seasonal employees and others—our unsung heroes and heroines—who had helped make our ambitious target a reality.

Interestingly, relentless hard driving was not the management technique that produced that success. The workers themselves were the toughest enforcers of weekly processing targets. Data entry operators hounded mail openers for more work. Instead of being thrilled at the prospect of having a few hours off, workers expressed consternation on the rare occasions that the computer was down.

High employee morale also did more to evoke an enthusiastic public response than did internal management. For the first time, seasonal data entry operators and workers who prepare returns for processing had been given a purpose and a mission, had been told about the results they had achieved, and had been thanked by their neighbors for an unbelievably fast refund. Instead of seeing

themselves only as part-time workers in some state bureaucracy, workers were helped to see the big picture, including the relationship between their efforts and the welcome checks that arrived in record-fast time in 1.8 million mailboxes throughout the Commonwealth.

The positive feedback was not limited to neighborly praise. When the filing season was completed, we noticed that income tax returns had increased substantially, above and beyond what we might have expected from growth in statewide employment or population. Most of the growth was in returns with payments—another reflection of a most heartening and financially beneficial increase in voluntary compliance with the tax laws.

Our 1986 refund turnaround target was three weeks, and we ended the SERVE '86 season with an average turnaround of just a day and a half over two weeks.

Generalizing from the Specific

Three and a half years ago, the Department of Revenue was an agency in turmoil and public disgrace. This year, record revenue collections have permitted a compassionate state budget and the largest tax cut in the history of the Commonwealth. A significant portion of the increased revenues over the past three years—fully a billion dollars—cannot be explained by the economy or even by increased enforcement efforts. Analysis of economic factors, controlled for enforcement revenues and cash flow considerations, showed that this portion of the overall increase was due to improved voluntary compliance: more and more people and businesses paying on time and in full before they were billed, audited, or pursued. This change in market behavior was produced by the people of DOR, who have been acclaimed by the governor for providing a model that could be followed at the federal level for deficit reduction.

Nothing terribly mysterious happened at DOR in the past three years. Employees were simply reinforced by more adequate resources, given a new context for their work, and provided with opportunities for recognition when their work was well done.

Much remains to be done. We are perhaps at the twenty-mile mark of this particular twenty-six-mile marathon. Most of the lessons we learned are transferable to almost any public-sector environment, but six themes follow that seem to have pertained in the DOR context. Most of them are almost painfully obvious, but, as Yogi Berra once said, "You can see a lot of things by just looking."

- *Articulate a common purpose.*

As necessary as this may seem, it is done all too infrequently in the public sector. In fact, we did not walk into the Department of Revenue prepared with this insight, and the process of developing the corporate value of honest, fair, and firm administration of the tax laws took shape over time. At the beginning, the linkage between the actions of one bureau and those of another, in pursuit of a common goal, was not at all manifest.

The lack of a common purpose was nowhere more apparent than in the Division of Local Services. Made up of several hundred employees, this division is responsible for monitoring the fiscal practices of the Commonwealth's 351 cities and towns; for providing administrative oversight for local property tax collec-

tions; and for distributing almost \$3 billion in local aid annually. In the 1980s, with Proposition 2½ mandating reductions in local spending and with full and fair valuation of property, these responsibilities became increasingly important, and ambitious new programs were undertaken to provide technical assistance for city management of scarce resources as well as automated support for analysis and property valuation. The accomplishments of the Division of Local Services have been significant in the past several years, but rarely were its employees and mission incorporated into the main, tax-collecting portion of DOR. Rather, it was often characterized, only half humorously, as the non-revenue-producing section of the agency, and in its own perception it was the last unit to be allotted resources and the first to have its budget cut. The new DOR corporate value gave Local Services a chance to be part of the family—taxpayers were being treated as if they were customers, and Local Services was helping cities and towns to help themselves.

At its best, a mission statement—one that goes beyond the description of function to become a definition of purpose—sets a context for the actions of all employees and gives value and meaning to otherwise routine tasks. It provides a simple and common goal, whether for an auditor trying to bring in dollars or a data entry operator cranking out refunds or a staff person certifying the tax rate of a local community. It supplies the public, which pays our salaries, with a clear and concise statement as to who we are and what we do. It is a benchmark for decisions that need to be made daily. It's also a value statement that carries pride and implies responsibility. It allows an employee to go home after even the worst day at work feeling that he or she has done more good than harm in the world that day. Finally, it sets a context for future improvements and even greater aspirations.

- *Harness public passions.*

Every public manager faces a wide range of opportunities in this area—many of which are not immediately apparent. Especially in a tax department, it is very easy to think of the public as an adversary rather than as an interested partner and potential ally. We looked for ways to develop advocate relationships with groups as unrelated as tax practitioners and human services advocates. With the former, linkage and partnership possibilities are conspicuous; but with the latter, it takes some doing to demonstrate that more revenue collections can fund needed services.

Of course, the crisis of public confidence gave us an obvious public passion to ride. But just as the Rogers Commission provided NASA with the opportunity to go well beyond recriminations over the Challenger disaster, so the task force presented us with the chance to seize opportunities from the jaws of adversity. We made use of the cyclical nature of public sentiments in a democracy by acknowledging public concerns and then harnessing them to assist us with the rest of our agency mission—obtaining tougher laws, more funding, and all the rest.

To accomplish this goal, we developed an aggressive communications strategy. Our reasoning was that public attitudes would have to change before private behavior could. We likened tax evasion to drunken driving—another “everybody does it” type of crime for which the costs are very grave. And we made every effort to put our story into English, not just on the tax forms but in press re-

leases and publications and special reports. This is a challenge for any agency in the public sector. Particularly in a tax department, what needs to be said is often cloaked in legal jargon and bureaucratise. Communicating—with clarity, precision, and even imagery—became a vital tool in our effort to change public attitudes and get people to care about what we were doing.

As we clearly saw, an internal mission that benefits the public and strong support *from* the public turn out to be mutually perpetuating. As employees frame their actions according to a defined mission in the public interest, public response is likely to become increasingly favorable. Then, as the public perception improves, employees realize that the price for feeling good about their work is accountability for their actions and their performance.

- ***Put your money where your mouth is.***

In this area, the most critical external constituency for DOR was Governor Dukakis. Without his initial support and the subsequent support of the legislature, we wouldn't have received increased statutory authority or additional appropriations for new employees and computer support.

Also crucial was the opportunity we were given to negotiate new salaries for our professional workers and to raise their status by several grades, to a level commensurate with their discretion and responsibility in administering the tax laws. In recognition of that authority, we negotiated a formal Code of Conduct for DOR employees with their union.

The ability to make major changes in compensation levels is a luxury most public managers are not afforded. However, even the smallest effort to ameliorate the working environment is noticed and appreciated. The return on investment in a fan, some plants, or a water cooler can't be quantified, but such qualitative improvements, as well as the concern they demonstrate, are sometimes valued more than one expects.

- ***Build a team and forge internal partnerships.***

Almost every public-sector agency has a hidden source of strength in its non-management employees—the ones who are almost universally responsible for actually getting the job done. Seeking these people out, empowering them to take responsibility, and shuffling the deck a bit in terms of authority in the bureaucracy were actions that proved to be key to our progress at DOR. Equally important was the provision of structured opportunities for communication among employees—through newsletters, reports, and meetings.

Team building also involves the outside talent brought in for key management. Recruits from outside a bureaucratic organization, with their advanced training, enthusiasm, and fresh approach, can markedly improve the management accountability of particular bureaus. Just as significant, their presence helps create a new peer group, a broader perspective, and some healthy competition among middle managers. At its best, this new peer group can grow into an internal partnership between the old and the new, among the artisans, the streetwise careerists, and the enthusiastic innovators.

- ***Thank 'em till it hurts.***

A good friend of ours, Bob Behn of Duke University, is responsible for this

aply turned phrase. Certainly, it takes a lot of thanks to make up for the fact that as a public manager one usually does not have the opportunity to offer financial incentives. Finding opportunities to acknowledge individuals, discrete teams that share a common goal, or five hundred employees en masse requires some vigilance. Once a framework has been established, though, the process is easier than it sounds. The initial letter to all employees in the beginning of 1983 was followed with several such communications to everyone at DOR. On the last go-round we put together a simple brochure, which we sent to everyone's home; it contained both acknowledgement of spectacular performance in the fiscal year just past and a pep talk for the year ahead. We used our annual report to profile key performers from various areas—and various levels—in the organization. Each week, a letter was sent to an individual in the department who had done something above and beyond the call of duty. Formal programs have been developed in many bureaus at DOR, and recognition of overall performance includes everything from awards for those who go a year without using a sick day to statewide performance recognition ceremonies.

Ample opportunities exist for acknowledging excellent work, and such efforts are greeted with much appreciation by employees who are often starved for attention and deprived of appropriate recognition.

- *Practice what you preach.*

If you're propounding the corporate values of honest, fair, and firm to your employees, you'd better be all of the same yourself. Nobody is beyond reproach 100 percent of the time, but especially in a revenue-collecting agency, it's essential to make the effort. Whether the issue is timecards or tax policy, setting an example and becoming a role model are the most important ways a chief executive can affect and lead an agency. Integrity in an organization begins at the top.

More subtly, in order to energize an organization for change, an executive has to energize himself or herself. Employees are often inspired or at least shamed into increased effort by the example of a boss who consistently asks, "Why not?" And when managers know that they're liable to have their project managed for them if they don't deliver, they are a lot more likely to get it a little closer to right on the first try.

Institutionalizing Innovation

The art of progress is to preserve order amid change and to preserve change amid order.

—Alfred North Whitehead

How much of the change that took place at DOR in the past three years was a function of timing and personality? How much of it will provide a foundation for lasting improvements in the agency's capacity to be accountable to the public? How many of DOR's current initiatives involve substantive and lasting change? What portion of recent productivity gains can be attributed to merely "changing the light bulbs"?

These are the kinds of questions that keep even exhausted change agents lying awake at night. Although there are no guarantees, here are a few of the things

we've done to ensure the permanence of what is good about what has changed at DOR.

First, we have put in place mechanisms to facilitate progress. We have entered into a three-year contract with a major consulting firm to completely redesign our computer-processing systems and to fundamentally alter standard operating procedures for all bureaus that make contact with the taxpayer. This project will enable us to manage information rather than merely process returns. It will turn our current batch-processing, file-cabinet-like system into an automated on-line support for day-to-day operations throughout the agency. The provisions of the contract are quite stringent: an external constituency has been established at least for the foreseeable future to ensure funding for the contract, and a strong infrastructure of affected employees is being established to see the project through. Over the past three years we have introduced office automation tools to the agency. Another contract has been signed for blanket procurement of some three hundred workstations over the next several years; this will markedly improve productivity as well as the quality and timeliness of our communications, both internally and externally.

On another front, we have established a project called the MASSTAX Legal Guide to create a thorough compilation of all existing interpretive statements, court decisions, and guidelines for Massachusetts tax statutes. The project has broad constituency groups both within and without DOR that need answers to unresolved tax questions and guidance in interpreting the statutes. A contract with a major legal publisher binds us to a specific time schedule in the production of these documents. In the process we've committed to the development of additional procedural and tax law regulations. We have also developed a new mechanism—a generic format called DOR Directives—for addressing specific tax questions.

Further, we've developed new routines for the agency which are now a part of standard operating procedures and are likely to persist, if only out of habit. The tax-filing status of all new employees is checked as a matter of course (and we've managed to institute this policy for senior managers throughout state government). All employees receive integrity training through a program that utilizes a film we developed to explain what the Code of Conduct is and the areas of conduct it addresses.

In a more strategic area, many DOR managers now develop business plans that set production targets and quality goals for the upcoming fiscal year. All managers also participate in a management-by-objective program, in which key goals are articulated in writing along with measures to evaluate achievement.

More subtle enhancements are the development of a DOR logo and building-wide directory signs that clearly indicate where various services are located. The presence of these signs, along with a distinctive and agency-specific logo, provides a more professional feeling among employees and, needless to say, will make it just a little tougher to disband newly created bureaus. An even more direct incentive for "institutionalization" has been created through the renting of separate space, with a five-year lease, for our Inspectional Services bureaus.

Slow but steady progress is being made in the area of legislative changes with regard to the very structure of the department—to include by statute, for example, an Inspectional Services Division. Still, the real challenge is to ensure con-

sistent resilience—to make the capacity for change ongoing.

The public has come to expect “customer service” from its DOR, and the legislature and the governor have seen what DOR can produce in the way of needed revenues. Any substantial slackening off in performance will not go unnoticed or unchallenged. In setting high standards and raising expectations, DOR has placed its future squarely at the pivotal point between government and its citizens and between the state’s spending requirements and government’s ability to raise the needed revenue without tax rate increases. It seems unlikely that having occupied this strategic high ground DOR could gracefully recede into its former less visible and in some ways more comfortable place outside the public or fiscal spotlight.

We’re often asked, “How do you know it won’t all come crashing down when the commissioner and his key staff inevitably depart?” Part of the answer may lie in maintaining a high level of expectation among the public constituencies we have developed. Another part of the answer, we hope, lies in the continued strong leadership of Mike Dukakis, the man who for the first time has made honest, fair, and firm tax administration a priority of a gubernatorial administration. But most of the answer lies in the original source of the progress: the people of DOR. The strength of their commitment to continuing levels of excellence is really the bottom line. And there are good signs for the future. Too many key people in too many key roles have come to expect success and know what it takes to get there. Too many key people now know what it’s like to feel like a winner instead of a loser, a risk taker instead of a seeker of the status quo, an entrepreneur rather than a bureaucrat. Winners inspire winners, and champions seek out equally talented successors. Maybe we have released the proverbial genie from the bottle forever. 🐉

Notes

1. This blue-ribbon commission, known as the Governor’s Advisory Task Force on the Department of Revenue, was appointed by then Governor-elect Michael S. Dukakis on December 1, 1982. It was chaired by Professor Paul R. McDaniel of Boston College Law School. Members included Alexander Aikens III; the Honorable Charles S. Cohen; Laurence D. Fitzmaurice (a past commissioner of the Department of Revenue); Marion R. Fremont-Smith; Francis W. Hatch, Jr. (former House minority leader and former Republican candidate for governor); Carole E. Marshall; Professor Oliver Oldman; the Honorable Austin T. Philbin; Catherine A. White; and John A. McMullen. Approximately twenty-five hundred hours of pro bono time were donated to the commission by the following consulting firms to conduct the analysis behind the final report: Price Waterhouse; Towers, Perrin, Forster & Crosby; Coopers & Lybrand; and Deloitte, Haskins & Sells. Jerry J. Fay and the late Joseph F. King of the Internal Revenue Service developed the recommendations relating to internal integrity assurances.
2. From 1951 to 1953, the House Ways and Means Subcommittee on Administration of the Internal Revenue Laws investigated allegations of corruption in the Internal Revenue Service. As a result of the investigation, 213 IRS employees were indicted.
3. Henceforward, the term “we” refers to the team assembled by Ira Jackson at the Department of Revenue, including First Deputy Commissioner Thomas D. Herman, who left the law firm of Hale and Dorr to join DOR; Thomas H. Fitzpatrick, who left his own private consulting firm to become first deputy commissioner for human resources; Harry M. Durning, former executive director of the Municipal Research Bureau, who became DOR’s director of communications; and a number of DOR career managers who became a part of the management team.

4. The Governor's Advisory Task Force report was completed on July 25, 1983. It provided an assessment of improvements required to guarantee the integrity of DOR operations, to improve the management of the department, and to create a model state agency that was honest, efficient, and responsive to the needs of taxpayers. Fifty-six specific recommendations for implementation over a five-year period were made in the following areas: tax administration—including computerization and enforcement activities; taxpayer assistance and dispute resolution; management of resources and organizational structure; services for cities and towns; human resources management; and integrity issues.
5. Following are some of the legislative initiatives that were compiled in the spring of 1983 for the Revenue Enforcement and Protection Program (REAP) and which had previously been submitted in DOR legislative packages: provisions to improve cigarette tax enforcement; the authority to suspend business licenses as a tax enforcement tool; the institution of reporting requirements for out-of-state boats docked in Massachusetts; and the requirement to withhold income taxes on gambling winnings.
6. REAP was enacted on July 1, 1983, as Chapter 233 of the Acts of 1983. Chapter 103 of the Acts of 1983, enacted on May 19, 1983, provided the Department of Revenue with a \$1.6 million supplemental budget for FY 1983. Chapter 289, enacted on July 15, 1983, contained the FY 1984 appropriation for the Department of Revenue, with an \$11 million, or 27 percent, budget increase over the prior year, including funds for 193 new positions.
7. The prior study on tax evasion which was updated in the spring of 1983 was called the *Department of Revenue 1981 Estimated Revenue Loss from the Underground Economy* and was released in November 1981. It was conducted by members of the staff of DOR's Audit Division and was based on an analysis of Federal Reserve and U.S. Commerce Department data in combination with the experience and estimates of tax professionals in other states.
8. President Reagan's comments were made in response to a question posed by Governor Dukakis about federal tax enforcement at an annual meeting between the president and the nation's governors on February 24, 1986.

The Reclamation of Boston Harbor:

A Scientist's Perspective

Gordon T. Wallace, Jr.

A major effort, costing in the neighborhood of \$2 billion, is under way to restore the environmental quality of Boston Harbor. While Boston Harbor is unquestionably one of the most polluted urban estuaries in the world, it is also one of the least understood with respect to the basic physics, chemistry, and biology involved. This information is essential for the purpose of identifying processes that control the transport, effect, and fate of contaminants entering the estuary. Failure to obtain this information may lead to continued inappropriate and unnecessarily expensive solutions to a complex environmental problem. An effective solution will require commitment to a substantial multidisciplinary research effort to supply the necessary comprehensive data base on the harbor and adjacent environments of Massachusetts and Cape Cod bays. Only then can intelligent, informed decisions be made to assure restoration and maintenance of the environmental quality of our coastal waters. Development of a well-informed and vocal citizens' action group may be a critical step in the achievement of this goal.

Boston Harbor is one of the most beautiful urban estuaries in the continental United States. Carved out by glaciers some ten thousand years ago, it still retains the basic characteristics that we find most desirable in our coastal waters: safe refuge for both large and small vessels; sheltered coves; beautiful and surprisingly remote islands; a variety of shorelines, ranging from sandy beaches to rugged, rocky foreshore; and abundant fish and shellfish that support both commercial and recreational fisheries.

A History of Abuse

Boston Harbor is also among the most battered and abused water bodies in the world. Levels of contaminants in its sediments and in its water equal or exceed

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those of the most polluted estuaries of the world. The history of abuse leading to this condition extends back well into the past century and beyond. The presence of Boston—New England's premier "city by the sea"—has exacted a severe toll on this great resource. A portion of this destruction it will never recover from—such as the loss of over 50 percent of the wetlands in the inner part of the harbor to accommodate large sections of Boston's expansion and growth.

More recent insults are the growing input of contaminants in the harbor, which has paralleled the growth of Boston and her neighboring communities, and an incredible lack of environmental awareness and concern on the part of the local citizenry. The combination of these factors has produced what is generally recognized as an international disgrace, especially for one of the most advanced nations in the world. Only now, as the result of pressure from active conservation groups, such as the Conservation Law Foundation, and from the courts, former judge Paul Garrity, and a dynamic EPA Region I administrator, Michael Deland, are steps being taken to begin the reclamation of Boston Harbor. It will be a long, painful, and very expensive process, and it is taking place in an almost total absence of scientific understanding of the harbor and its adjacent waters, Massachusetts and Cape Cod bays.

The Price of Ignorance

In the text that follows I hope to establish an awareness that the absence of scientific knowledge regarding the issue at hand raises significant questions concerning the reclamation and future of the harbor and the future of Massachusetts and Cape Cod bays. I write this article from the perspective of a scientist working in the area of marine science and, more specifically, as one who is actively conducting research concerning the transport, fate, and biological effects of metals in marine waters. This area of research represents but a small fraction of current efforts to determine the sensitivity of oceanic and coastal environments to anthropogenic (man-made) influence. The need for information from such studies is becoming even greater as man's ability to affect environmental conditions grows.

Most researchers working in the environmental sciences quickly learn that they must be aware of and consider many different processes when attempting to solve environmental problems. The solution to most such problems must address important variables in the fields of biology, physics, and chemistry which influence the phenomenon under scrutiny. Failure to do so may lead to improper interpretation of results and therefore to erroneous conclusions. In short, most environmental questions are inherently complex, requiring a multidisciplinary approach for their solution.

The Scientist and the Manager

And therein lies another problem. In general, scientists are conservative in their judgment as to when a given problem has been "solved." Invariably, in the conduct of scientific research, the solution to one question raises additional questions. Given his inquisitive nature, the practicing scientist finds this aspect of his work extremely rewarding, but to those who wish to apply the solution to existing problems, it is immensely frustrating. The manager who needs to translate

research results into action in order to solve a given environmental problem is often working under a time constraint. He or she is frequently viewed as more than willing to sacrifice thoroughness of knowledge for the sake of meeting deadlines. The scientist, on the other hand, is often perceived as wishing to prolong support of his or her own research interests beyond what is required to “satisfactorily” answer the question posed and, as a result, is thought not to be genuinely concerned about the needs of the manager.

There is some truth in both these views. The trouble is that this mutual distrust results in a reluctance on the part of both the manager and the academic scientist to work with the other, and it is only through their cooperation that state-of-the-art techniques can be brought to bear upon important environmental problems. The lack of a working partnership leads to less than satisfactory resolution of environmental problems and, ultimately, to the application of remedial action which, in many cases, is extremely expensive to implement. Recent and current activities aimed at improving the environmental quality of Boston Harbor serve to demonstrate these unhappy consequences.

Boston Harbor/Massachusetts Bay,

A Worst Case Scenario

I know of no other major estuary adjacent to a large U.S. population center of which so little is understood in terms of the system’s basic physics, chemistry, and biology. Perhaps there are two principal reasons for this lack of understanding. The first is a general tendency for marine scientists to focus on globally important phenomena rather than on coastal marine problems. Certainly this is reflected in the objectives of the major funding agencies that supply most of the monies for research in the marine environment. Second, those estuaries and adjacent coastal waters that do enjoy a more comprehensive data base are in proximity to academic institutions with active marine research programs. For example, Narragansett Bay benefits from the presence of the University of Rhode Island’s Graduate School of Oceanography; Buzzards Bay, from the Woods Hole Oceanographic Institution; Long Island Sound, from the marine programs at the University of Connecticut and Yale University; Delaware Bay, from the University of Delaware’s College of Marine Studies; Chesapeake Bay, from the University of Maryland’s Chesapeake Biological and Horn Point laboratories; and so on. The list of such associations continues around the coastal regions of the country.

I do not mean to imply that there have been no studies made of Boston Harbor. On the contrary, there have been many, dealing with various aspects of the harbor and costing millions of dollars. But most of them have been site specific and have dealt with such activities as dredging and construction; they are not of the nature required to develop an overall, comprehensive working knowledge of the harbor—one that is capable of supporting intelligent management decisions now and in the future. The recent development of Boston’s 301(h) application for a waiver from the Clean Water Act’s requirement that all communities adopt secondary sewage treatment is a good example of the inadequacy of such studies.¹

Boston’s 301(h) Waiver Application

A waiver from the Clean Water Act’s mandated requirement for secondary treat-

ment of sewage can be granted to coastal communities provided they can demonstrate a lack of significant environmental impact on the ecosystem receiving the primary treated wastes.² Specific criteria are to be met in this regard, and the applicant is required to furnish evidence that existing or future discharges will meet such criteria. The Boston 301(h) waiver application was an expensive, narrowly focused information-gathering exercise that realistically could not have been expected to provide the comprehensive understanding needed to support long-term management strategy for the harbor and adjacent bays. Such knowledge cannot be amassed on short notice to expedite a particular project, no matter how important or urgent the project may be.

Given that extensive knowledge of the harbor/bay ecosystem had not already been secured, it was impossible to judge whether the criteria stated in the application had been met—for example, the requirement that the population of organisms living on the seafloor would not be significantly affected by the discharge of wastes.³ Careful evaluation of naturally occurring changes in the native community structure of the bottom-dwelling organisms is required before changes due to pollutant stress can be determined. The work needed to perform this evaluation is time-consuming and expensive. Most municipalities have neither the expertise nor the willingness to support the effort needed to adequately define the balanced indigenous population. The effort made in this regard for the Boston waiver application fell short of providing a rigorous characterization of these communities for either Boston Harbor or Massachusetts Bay.

Environmental studies conducted in the harbor have been designed largely to meet specific regulatory or legal objectives. As a result, they generally fail to recognize the broader environmental consequences of the decisions they produce. Boston's 301(h) waiver application is an example of one of these studies. It did not consider the overall environmental consequences of the choice between primary and secondary treatment of its sewage. For instance, secondary treatment may well lower the input of contaminants to coastal waters but at the same time increase the risk that limited groundwater supplies will be contaminated (from land-filled secondary treatment sludge) and that there will be a deterioration of air quality (from incineration of sludge). In my opinion, we can no longer afford to maintain this myopic approach to problems that affect more than one segment of the environment. A recent decision by the EPA to tentatively deny a similar 301(h) waiver for the South Essex Sewerage District discharge was based largely on potential interference with recreational use of waters in the vicinity of the waste discharge.⁴ Surely preservation of recreational water uses should not receive higher priority than increased human health risks posed by landfills or incineration of the toxin-laden sludge generated by most secondary plants.

It may be further argued from a scientific perspective that studies like the one conducted in preparation of the 301(h) waiver application inherently require comprehensive knowledge of the fundamental biological, physical, and chemical processes that may be affected by or that may affect contaminants released to coastal environments. For example, biological consequences of the contaminants include the inhibition of growth and reproduction and sometimes the death of organisms living in the vicinity of the waste discharge. Physical processes involve the circulation patterns that control the dispersion and transport of toxic substances away from the point of discharge of the waste. And chemical reactions

may occur that either enhance or decrease the toxicity of contaminants in the discharged waste. All these processes interact, making the accurate prediction of the effects of these contaminants difficult. The research necessary to produce such knowledge has been conducted for few if any such coastal areas in this country or, for that matter, in the world, largely because of the emphasis on expenditures for specific applied pieces of research that do not provide the perspective needed to adequately support critical management decisions. The study conducted for the Boston 301(h) waiver application is just one example of many such unsatisfactory expenditures. Indeed, the scientific community is probably better able to predict the consequences of waste disposal in open-ocean waters than in coastal waters, despite the more immediate relevance of the latter to human health and welfare.

Therefore, Boston's 301(h) waiver application, while attempting and often failing to meet specific requirements mandated by the law, also completely failed to generate the comprehensive picture required for future management decisions. The cost of this failure in dollar terms alone was and will continue to be immense: in excess of \$2 million just for development of the waiver application and \$2 billion plus worth of construction to clean up Boston Harbor.⁵ Delays in the state's commitment to secondary treatment of its sewage while the waiver application was being prepared have resulted in the loss of hundreds of millions in federal cost-sharing dollars.⁶ Costly errors in environmental decision making are likely to be repeated as long as there is a continued emphasis on narrowly defined, site-specific projects at the expense of an in-depth understanding of the basic issues involved.

Scientific Uncertainty

A brief description of the extent of current ignorance concerning the harbor and its adjacent bays is in order. The three primary areas of concern are biological, physical, and chemical processes.

Biological Processes

Boston Harbor supports an important recreational fishery (winter flounder) and commercial fishery (lobster and clams). Both are intimately coupled with and dependent on the production and growth of other members of the biological community, such as the primary and secondary producers. (Primary producers are plants that are capable of utilizing sunlight to produce organic matter. The organic matter of the plants may then be consumed by animals—the secondary producers—who in turn may be eaten by other animals, such as the fish and shellfish found in the harbor.) Disruption to any members that form a link in the harbor's "food chain" may substantially affect its other members. The dynamic linkage between various elements in this food chain has not been defined. Evidence gathered in the course of preparing the 301(h) waiver indicates that the bottom-dwelling communities in the harbor have been severely impacted. Winter flounder in Boston Harbor have one of the highest rates of cancer observed in any coastal fishery so far examined.⁷

Another increasingly common problem in estuarine and coastal waters is a phenomenon called eutrophication, which results from the addition of large

amounts of nutrients to natural waters. Nutrients essential to the growth of plants, such as inorganic nitrogen and phosphorous, are frequently present in high concentrations in primary and especially secondary treated sewage effluents. When excessive amounts of these nutrients are introduced into coastal waters, for example from the discharge of treated sewage effluents, higher than normal production of plant organic matter may result. Under some environmental conditions, the subsequent death and decay of the excess plant matter may lead to such a depletion of the water's oxygen that most forms of marine life cannot survive. The degree of eutrophication is dependent on a complex array of biological, physical, and chemical factors.

The extent to which eutrophication of the harbor and adjacent bays has already occurred or is now occurring has not been characterized. Low oxygen values have been observed both in the harbor and in Massachusetts Bay, but the information at hand is insufficient to establish the immediate causes of this condition.

Physical Processes

The extent to which we understand the physics of the harbor/bay system is crucial. Physical processes control the circulation patterns in the system and thus the rate at which the waters of the harbor are exchanged with those outside of it. These processes are therefore of major importance in the transport and ultimate distribution of contaminants released to the harbor's waters and in their eventual impact on the harbor and adjacent bay ecosystems. Assessment of the impact of waste disposal to such waters is obviously partly dependent on the extent of our knowledge in this regard.

Available information on the physics of the harbor is restricted to results of sporadic measurements of the temperature and freshwater content of harbor waters; evaluation of the mean tidal currents for navigational purposes; and several site-specific studies in the vicinity of existing and proposed major outfalls (the word *outfall* refers to the point at which a drain or pipe discharges wastes into a body of water). None of the results of these studies have appeared in the peer-reviewed scientific literature.⁸ Measurements of the distribution of temperature, freshwater content, and velocity of harbor waters have been conducted neither frequently enough nor in enough locations to define how long water resides in the harbor (residence time) or to determine the physical circulation patterns of its water. Knowledge of both is required before the distribution and transport of contaminants in the harbor can be understood. For example, the concentration of a given pollutant in harbor waters depends in part on how long the water remains in the vicinity of a waste discharge. Clearly, a longer residence time will result in a higher concentration of contaminants in the water before it moves from the vicinity of the discharge. The residence time of water in different sections of the harbor can vary in order of magnitude, depending on a number of factors that have yet to be completely defined.

Several attempts have been made to develop mathematical models that describe the physical circulation of the waters in Boston Harbor and thus predict the dispersion of contaminants from the outfalls and combined sewer outfalls.⁹ These include efforts by Hydrosience, Inc., in 1971 and 1973; EG&G in 1984; and M.I.T. in 1984 and 1985.¹⁰ None of these models has been satisfactorily validated,

although work this year by R. F. Kossik, who compared the distribution of volatile organic compounds emanating from the Deer Island outfall with that predicted by the M.I.T. models, is a first step in the right direction.¹¹ Again, none of this work has been published in peer-reviewed journals.

Chemical Processes

Contaminant distributions within the harbor and adjacent bays have been only partially described. Sediment concentrations of metals are among the highest reported in the world's estuaries.¹² The limited data on organic contaminants, such as PAHs (polycyclic aromatic hydrocarbons) and PCBs (polychlorinated biphenyls), also establish Boston Harbor as one of the most grossly contaminated estuaries in the world.¹³ The toxic properties of these inorganic and organic contaminants have been well established. These contaminants are also present in the sediments of Massachusetts Bay.¹⁴ What we do not know is the exact nature of the sources of these contaminants, the mode of their transport, and their final fate and biological impact. For example, the degree to which contaminants released from the Deer Island and Nut Island outfalls are trapped in Boston Harbor sediments has not been adequately determined. M. G. Fitzgerald tentatively estimated that only about 3 percent of the input of selected metals to the harbor from the Deer Island and Nut Island plants is retained in harbor sediments.¹⁵ If Fitzgerald's estimate is correct, the remaining 97 percent of the input has been transported to Massachusetts Bay and has therefore contributed to the contamination of its sediments. No such estimates are available for the retention of organic contaminants.

Concentrations of metals in the waters of Boston Harbor are ten to one hundred times higher than those expected in clean coastal seawater.¹⁶ Concentrations of copper in the harbor frequently exceed current EPA water quality criteria. The distribution of this and other metals in harbor waters also indicates that sources other than the sewer outfalls may be of importance, especially in the Mystic and Chelsea rivers, where discharges from combined sewer outfalls may be most significant.

Sources of contaminants to Massachusetts Bay are even less well understood. Preliminary data obtained by Wallace and Gardner (in preparation) indicate that inputs from the Merrimack River and the atmosphere, not inputs from coastal waste discharges, are by far the most important sources of copper contamination in Massachusetts Bay. These sources may also be significant in the supply of organic contaminants to Massachusetts Bay waters and sediments.¹⁷ Wallace and Gardner's data also suggest that metal concentrations in the water column of Massachusetts Bay may be two to three times higher than those of adjacent Gulf of Maine waters.

It is evident that the sources of contaminants to the harbor and Massachusetts and Cape Cod bays have not been well characterized. Even less is known of the transport and effects of these contaminants in this ecosystem. We do know that both physical and biological processes influence the movement and destiny of contaminants in coastal ecosystems. Contaminants released in areas having high-dilution rates may satisfy end-of-the-pipe requirements while still producing a selective concentration of the same contaminants in areas of active sediment deposition. This process, sometimes referred to as sediment focusing, may lead to

anomalously high concentration of contaminants in sediments and must be considered whenever wastes are disposed in the near-shore coastal zone. Information is nonexistent on the significance of this process in both the harbor and adjacent bay environments.

It has also been established that the toxicity of contaminants in aquatic environments is a function of their chemical and physical form. The particular form (speciation) of a contaminant—that is, whether it exists free, attached to a particle, or in association with another dissolved constituent to form a complex—greatly affects its toxicity, because these different forms are more or less likely to interact with a given organism. For example, a toxic metal attached to a particle cannot pass into the interior of a plant cell, whereas the same metal, if dissolved in water, may readily enter the cell and thus interfere with its internal biochemical machinery. Knowledge of the speciation of these contaminants is therefore of paramount importance if one is to assess the potential impact on the biological community. Failure to consider this factor may lead to major errors in the assessment of potential toxicity of contaminants. This in turn may lead to correspondingly large errors in determining the degree of control required to limit the input of contaminants to the ecosystem. The consideration of speciation is therefore of fundamental importance in the development of environmentally sound pretreatment requirements.¹⁸ Ignorance of the speciation of contaminants, however, is not unique to Boston Harbor; it is a major concern among scientists and regulators worldwide.

Perhaps one of the best overall indicators of the current state of knowledge of the physics, biology, and chemistry of the harbor is the fact that fewer than ten papers describing the results of research conducted in Boston Harbor have been published in the peer-reviewed scientific literature.

The Need for a Vocal Constituency

I have already suggested the reasons for this current state of affairs—the lack of adequate funding for research in our coastal waters and a specific lack of interest in conducting research in Boston Harbor and Massachusetts and Cape Cod bays. The latter certainly to some extent reflects the former; that is, most who wished to pursue research in the harbor quickly recognized the inadequacy of support for such an effort at both the state and federal level. In contrast, other coastal estuaries enjoy an active and vocal support of efforts to understand and protect what people in adjacent communities consider to be an essential resource. This support has not gone unnoticed by the state and federal legislators who represent these vocal constituents, and the result has been the allocation of funds to support at least some of the research needed to protect and wisely manage these estuaries.

The lack of support for such efforts with regard to Boston Harbor and its adjacent bays was made painfully evident to myself and some of my colleagues when we were asked to define the problems facing Boston Harbor at a meeting held in Washington, D.C., more than a year ago. Sponsored by the National Oceans and Atmospheric Administration's Estuarine Programs Office and the United States Environmental Protection Agency, the meeting was designed to focus attention on the plight of many of our most severely impacted estuaries

and garner the necessary legislative support to begin to address these problems. Of the approximately fifty people attending the presentation, none could be readily identified as representing one of our legislative delegates to Washington.

On the other hand, those presenting the case for Chesapeake Bay attracted an audience of over twelve hundred. The Chesapeake is one of the estuaries chosen for inclusion in the EPA Bays Program. Also included in the program are Puget Sound, San Francisco Bay, Albemarle Sound, Long Island Sound, Narragansett Bay, and Buzzards Bay. All enjoy a vocal citizens' constituency and/or the attention of influential legislators.

It is clear that until such attention is attracted to the needs of Boston Harbor and its adjacent bays, there is little hope of acquiring federal funds for support of the needed research. The scientific justification for funds is clearly there, indeed, perhaps more so than for most of the bays currently being considered for inclusion in the EPA Bays Program. The popular and political support is not yet in place. Recent progress has been made in this regard, however, with the formation of Save the Harbor-Save the Bay, Inc., a concerned citizens action group that has already made significant progress in the effort to build the necessary popular support.

Even if the required support were in place and the Boston Harbor/bay system were included in the EPA Bays Program, there is a reasonable doubt as to whether the heavily management-oriented and grossly underfunded Bays Program would permit the development of the necessary fundamental information. The common sense argument that one cannot hope to effectively manage what one does not understand has apparently failed to convince those responsible for the management of coastal resources that there is a need for comprehensive research programs. The agelong debate between the relative merits of so-called applied and basic research continues at the expense of progress in unraveling the mysteries of these complex environments. Unfortunately, it is the public who must pay the price in the end.

The \$2 million plus cost of the recent Boston 301(h) waiver application is perhaps the best example of the cost of ignorance in this regard. Had the fundamental knowledge of the biology, physics, and chemistry of the harbor/bay system been available, the answers to the questions posed in the application process would have been at hand. Instead, a very limited and extremely expensive study was conducted which did little to alleviate our ignorance of the workings of this ecosystem. The cost became even greater when the federal share of support for the result of this study—a \$2 billion planned cleanup of the harbor—dropped from 90 to 55 percent while the application was still being prepared. The price tag for persisting ignorance may become still greater, as waste disposal practices in Massachusetts coastal waters continue to be developed in the absence of information recognized as fundamentally important by scientists working in the field.¹⁹

The Need for Research

Why do we need to initiate a major research program to study Boston Harbor and Massachusetts and Cape Cod bays? One reason is that our lack of knowledge about the basic characteristics of this ecosystem has become coupled with

an immediate requirement for critical management decisions. The most urgent issue in this regard involves determination of the location for the outfall from the new secondary treatment facility to be built on Deer Island. The decision must be made by September 1987, in accord with a federally mandated court order.²⁰ This will be the largest such outfall in terms of flow in the country. It is also important to note that the secondary outfall effluent will still contain substantial concentrations of toxic contaminants and as such may significantly affect the quality of the receiving water. It is entirely possible that if the outfall remains in the harbor, EPA water quality criteria for copper may be violated. Continued degradation of the harbor environment will occur, although the impact will presumably not be as great.

Extension of the outfall to a location somewhere out in Massachusetts Bay may well be required. This decision should, however, be carefully weighed. The flux of contaminants to the bay may increase, depending on the efficiency with which the sediments of Boston Harbor serve as an effective trap of the contaminants now being released into it. Also, because the secondary treatment process does little to remove nutrients from the effluent and in fact may actually increase their concentration, the input of these nutrients to Massachusetts Bay may also become greater.²¹ The enhanced flux of nutrients to Massachusetts Bay may serve to further aggravate the low oxygen levels that have been previously observed. Indeed, the observation of depressed oxygen concentrations in the bay contributed to the decision of the EPA to deny Boston's application for the 301(h) waiver. Unfortunately, information on the nutrient and oxygen dynamics of Massachusetts Bay does not exist, nor does knowledge of the necessary facts concerning the biological, physical, and chemical processes that can be expected to influence the fate and impact of the secondary effluent contaminants. In effect, because of our ignorance in these matters, we are about to initiate an environmental experiment of very large dimensions, the consequences of which may be substantially different from those anticipated.

Another reason to initiate a major study of the harbor/bay system is the fact that other sources of contaminants to Massachusetts and Cape Cod bays may be as important or more important than currently recognized ones. Future management strategies must take into account this possibility. Such huge expenditures of money as the \$2 billion investment to clean up Boston Harbor must be justified by a demonstration of their real contribution to improved environmental quality.

Clearly, the transition from the current rudimentary primary treatment to secondary treatment will ameliorate the quality of the harbor environment. However, contaminants will continue to enter the harbor/bay system. We must do our homework and gain a much more sophisticated knowledge of what now must be considered one of the least understood harbor/bay systems in the country. The ultimate cost of the needed research, while substantial, is minute in comparison to the billion-dollar price tags for correcting past mistakes. Only when the results of such research are in hand will we be in a position to make the judicious decisions that will be necessary to guide the current reclamation and future preservation of our invaluable harbor resource. ■

Notes

1. The formal title of this document is *Application for a Waiver of Secondary Treatment for the Nut Island and Deer Island Treatment Plants (Commonwealth of Massachusetts, Metropolitan District Commission, 1979)*. Section 301(h) of the Clean Water Act of 1977 (Public Law 95-217) amended the Federal Water Pollution Control Act Amendments of 1972 (Public Law 92-500) to allow waiver of the requirement for a minimum of secondary treatment by publicly owned treatment works discharging to marine waters. The applicant must demonstrate compliance with a number of requirements defined in the law. Approval of the application must be obtained from both the state and the administrator of the Environmental Protection Agency. A general overview of the evolution of laws governing discharges into marine waters may be found in James E. Krier, "Ocean Discharge of Municipal Wastes: Legal and Institutional Aspects," in *Ocean Disposal of Municipal Wastewater: Impacts on the Coastal Environment*, ed. Edward P. Myers and Elizabeth T. Harding (Cambridge, Mass.: Sea Grant College Program, M.I.T., 1983).
2. Primary treatment of sewage involves partial removal of solid matter and contaminants followed by addition of chlorine to the remaining waste effluent for disinfection purposes. Secondary treatment incorporates a second treatment stage to remove a much greater fraction of the suspended solids and contaminants from the raw sewage. The solids removed from the original sewage by either of these two processes are referred to as sewage sludge. The sewage sludge from the secondary process contains much higher concentrations of toxic contaminants than does the sewage sludge formed from the primary treatment because of the more efficient removal of toxins by the secondary treatment process. It should be noted that the secondary process, while more effective than the primary process, still leaves high concentrations of contaminants in the effluent.

The water and residual solid material remaining after treatment by either process are then discharged through pipes, called outfalls at the point of discharge, which extend from the treatment plant into nearby coastal waters.
3. A wide variety of organisms live on the seafloor; this community is called the benthos (*benthos* is a Greek word meaning seafloor), or the bottom-dwelling community. The organisms present often are sensitive to alterations in their habitat incurred both by natural phenomena (storms, seasonal changes in temperature and food supply, and so on) and man's activities (for instance, waste disposal and dredging). The introduction of pollutants to the seafloor may substantially alter the abundance and composition of the communities of organisms originally present (referred to in the federal regulatory jargon as the "balanced indigenous population"), as the more sensitive species are replaced with more pollution-tolerant ones.
4. The EPA's decision to deny the waiver was conveyed in a letter to Mr. Craig Stepno, chairman of the South Essex Sewerage District in Salem, Massachusetts, from Michael R. Deland, EPA Region I administrator, on 9 April 1985.
5. The cost of preparation of the 301(h) waiver application was communicated to the author by Leslie O'Shea, chief of monitoring, Massachusetts Water Resources Authority. The estimate of the \$2 billion plus cost to clean up the harbor was obtained from a report to the Commonwealth of Massachusetts Metropolitan District Commission entitled *Combined Sewer Overflow Project Inner Harbor Area Facilities Plan*, December 1982, prepared by O'Brien & Gere Engineers, Inc., of Boston, and from the *Supplemental Draft Environmental Impact Statement/Report On Siting of Wastewater Treatment Facilities for Boston Harbor*, December 1984, prepared by C. E. Maguire, Inc., of Providence, Rhode Island.
6. See Krier, "Ocean Discharge of Municipal Wastes." The present level of federal support for construction of wastewater treatment plants is expected to decrease under the current administration (information communicated to the author by Paul DiNatale, press secretary, Massachusetts Water Resources Authority, in a conversation on October 10, 1986).

7. R. A. Murchelano and R. E. Wolke, "Epizootic Carcinoma in the Winter Flounder, *Pseudopleuronectes americanus*," *Science* 228 (1985): 587.
8. Publication in the peer-reviewed scientific literature generally implies three things: one, that the work provides a significant advancement in our knowledge of the subject being investigated; two, that the methodology used was appropriate to the task; and three, that the interpretation of results and the conclusions drawn were justified by the data gathered.
9. Drains used to collect both stormwater and sewage are commonly referred to as combined sewers. Under normal flow conditions, the two types of wastes are kept separate by a barrier inside the pipe, and the stormwater part of the flow is collected and discharged through a pipe leading to the harbor, while the sewage part of the flow is collected and sent to the treatment plant. However, under conditions of heavy rainfall, the sewage becomes mixed in with the stormwater, resulting in discharge of untreated sewage through the combined sewer outfall. Even during dry weather, untreated sewage present in the combined sewer outfalls is flushed into the harbor. This is caused by nine- to eleven-foot tides that force water from the harbor to enter the combined sewer outfall; when the tide recedes, sewage is flushed out the end of the pipe. One-way gates are supposed to prevent intrusion of this tidal water into the pipes. However, many of these gates are malfunctioning. If this were not the case, most of the pollution from the combined sewer outfalls would be caused by occasional very heavy rainfall. As it is, the dry-weather discharges are more significant.
10. Hydrosience, Inc., *Development of Water Quality Models of Boston Harbor and Development of Hydrodynamic and Time Variable Water Quality Models of Boston Harbor*, prepared for the Massachusetts Water Resources Commission, Boston, 1971 and 1973, respectively; EG&G, *Oceanographic Study of Various Outfall Siting Options for the Deer Island Treatment Plant*, prepared for Havens & Emerson/Parsons Brinckerhoff, Boston, 1984; J. J. Westerink, K. D. Stolzenbach, and J. J. Connor, "A Frequency Domain Finite Element Model for Tidal Circulation," *Report No. 85-006, Massachusetts Institute of Technology Energy Laboratory* (Cambridge, Mass., 1985); and A. M. Baptista, E. E. Adams, and K. D. Stolzenbach, "The Solution of the 2-D Unsteady, Convective Diffusion Equation by the Combined Use of the FE Method and the Method of Characteristics," *Report No. 296, R. M. Parsons Laboratory for Water Resources and Hydrodynamics, Massachusetts Institute of Technology* (Cambridge, Mass., 1984).
11. R. F. Kossik, "Tracing and Modeling Pollutant Transport in Boston Harbor," Master's thesis, Department of Civil Engineering, Massachusetts Institute of Technology (Cambridge, Mass., 1986).
12. Gordon T. Wallace, "Boston Harbor and Massachusetts Bay, Status of the Habitat: Chemical Considerations," *NOAA Technical Report* (Washington, D.C., in press).
13. Michael P. Shiaris and Douglas Jambard-Sweet, "Polycyclic Aromatic Hydrocarbons in Surficial Sediments of Boston Harbor, Massachusetts, USA," *Marine Pollution Bulletin* (in press).
14. T. R. Gilbert, A. M. Clay, and C. A. Karp, "Distribution of Polluted Materials in Massachusetts Bay," *Technical Report of the New England Aquarium* (Boston, Mass., 1976).
15. M. G. Fitzgerald, "Anthropogenic Influence on the Sedimentary Regime of an Urban Estuary-Boston Harbor," Ph.D. diss., MIT/Woods Hole Oceanographic Institution, WHOI-80-38 (Cambridge, Mass., 1980).
16. G. T. Wallace, Jr., J. H. Waugh, and K. A. Garner, "Metal Distribution in a Major Urban Estuary (Boston Harbor) Impacted by Ocean Disposal," in *Urban Wastes in Coastal Marine Environments*, ed. D. A. Wolfe and T. P. O'Conner (in press).
17. John G. Windsor, Jr., and Ronald A. Hites, "Polycyclic Aromatic Hydrocarbons in Gulf of Maine Sediments and Nova Scotia Soils," *Geochimica et Cosmochimica Acta* 43 (1979): 27.
18. Pretreatment consists of removal of toxic substances from industrial waste water before the water is discharged into the sewer system.

19. A document entitled *Study Plan for Basinwide Management of the Boston Harbor/Massachusetts Bay Ecosystem* has been prepared for the Marine Resources Coordinating Committee of the Massachusetts Executive Office of Environmental Affairs, by the Technical Advisory Group for Boston Harbor and Massachusetts Bay. The document identifies those research and monitoring efforts deserving highest priority in light of currently recognized management needs. The Technical Advisory Group is composed of marine and social scientists as well as representatives of local, state, and federal regulatory agencies and public interest groups. Copies of the document may be obtained by writing Dr. Judith Pederson, Coastal Zone Management Office, Executive Office of Environmental Affairs, 100 Cambridge St., Boston, MA 02202.
20. *Schedule I Compliance Order*, U.S. District Court Case, *United States of America v. Metropolitan District Commission et al.*, Civil Action 85-0489-MA; and *Conservation Law Foundation of New England, Inc., v. Metropolitan District Commission et al.*, Civil Action 83-1614-MA.
21. C. B. Officer and J. H. Ryther, "Secondary Sewage Treatment Versus Ocean Outfalls: An Assessment," *Science* 197 (1977): 1056.

The Clouds:

A Portrait of One Family in Wartime Cambridge

Fanny Howe

The following is a portion of a work in progress, a biography of Mark DeWolfe and Helen Howe, two Bostonians born soon after the turn of the century. The book describes the adult years of this sister and brother, each of whom participated in American life at many levels important to the social and intellectual currents of the country. This section of the biography describes Cambridge in the World War II years.

At number six Craigie Circle in Cambridge, Massachusetts, a family of three—Molly (from Ireland) and her two small daughters—lived out the war years. For three and a half years they were without their husband and father, Mark Howe, as he was in Europe. They occupied a first-floor apartment in a brick building within easy walking distance of Harvard Square. Craigie Circle was made up of two large apartment complexes, a small weedy lot behind, and a tarmac road between.

On Craigie Street there was an Episcopal convent, another apartment building, and residential houses made of wood. Around the corner was the Buckingham School (brick too), which the girls attended; classes there were about twelve and under in size, mostly under. Many of the students were children of academics, sons and daughters of linguists, historians, and scientists. Their parents were then in their late thirties and early forties. Many of the men were gone, yet Cambridge was a man's world even without them.

Every Sunday Molly dutifully transported the two girls by subway to number sixteen Louisburg Square, on Beacon Hill, to have midday lunch with their grandfather, Mark's father. He lived in a townhouse with an Irish maid, like Molly named Mary, who was tucked in a bedroom behind the downstairs kitchen. He was a portly man with a watch chain and vest, a white moustache as coarse as his hair, a stammer, and a manner steeped in the good nature ascribed to those with few doubts.

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His apartment, a floor-through, did not rise to much sunlight, and yellow lamplight instead spread over the tables and chairs and objects brought over from China generations before. A Steinway sat near one window, and there he played and sang Gilbert and Sullivan and favorite hymns. On those visits the girls were not allowed to wear dungarees or sneakers but had to dress up, and in the cooler weather they wore matching coats and hats—navy blue with naval insignia—and often they were urged to march up and down, saluting and singing “From the Halls of Montezuma” to their grandfather. Every Sunday they had the same lunch: chicken consommé, chicken and rice, and ice cream or pie for dessert. Water jiggled in a crystal fingerbowl beside each plate.

A smell of books lingered around the stuffed shelves; some of the books were for children, but they were not the ordinary American fare. These were Victorian English, including pictures of curly-haired children in pinafores, stone walls higher than most parents, black golliwogs, and gardens containing pale but specific flowers. Molly the mother knew the books from her own youth in Dublin, and she knew the songs and flowers. A common education, Anglocentric and literary, bound her to her husband and his family even though their personal histories were literally miles apart.

She had not left Dublin intending to stay in America but had come to do some business for the Gate Theater and to visit her Aunt Muriel and her Uncle Willard Sperry, then dean of Harvard’s Theological School. She had a whirlwind courtship with Mark Howe, though, and married him in 1935. Afterwards she said they had “an awful honeymoon in Washington at the burial of Oliver Wendell Holmes. Mark was public relations man. I was surrounded by Supreme Court justices. One of them glared at me as if I should have been shot for not being a Lodge or a Lowell.”

She insisted that her in-laws were not exactly welcoming to her, “a penniless actress from Dublin,” as she called herself. A leggy brunette with hazel eyes and a dagger tongue and humor, she came from a Protestant background. She associated the Catholic Church in Ireland with fascism in Europe and allied herself with leftists who thought along the lines of Bernard Shaw’s Fabian Society. Many cousins and friends had died in the Spanish Civil War, fighting Franco. In Dublin she attended Communist meetings with a tiny group influenced by another leftwing playwright, Sean O’Casey. But her central interest, she soon discovered, was humanity, not ideology. The theater was always to be the center of her mind and heart.

During the war years in Cambridge she worked as director of the Idler Club, the Radcliffe College drama society. Nearly every afternoon and night she left the children with a sitter and went to work, for sixty dollars a month, putting on productions. *The Playboy of the Western World* was staged at the Brattle Theater in Harvard Square, with Jack Lemmon playing the father. F. O. Matthiessen, the Harvard professor of American literature, helped her get the job because of her background as actress, playwright, and director in the Abbey and Gate theaters in Dublin.

For nine years (1938–1947) she didn’t see her family, or Ireland. Terribly homesick and often feeling like an alien in her husband’s family, she did nonetheless have “a mass of friends” in Cambridge. They included Harvard professors and their wives as well as actors and writers. She was one of the few working women

in her circle at that time. Only a few went abroad as volunteers for the Red Cross. Even fewer went to work for an income. Many of the men were away, either in the army or navy, in Europe or Asia; those who stayed at home did so because of some physical disability or as conscientious objectors. Mark enlisted several months before most of his colleagues did.

"After Pearl Harbor," Molly said years later, "Mark felt he had to sign up. A world dominated by Hitler was too horrible to contemplate. First he went to Charlottesville to train, then to Algiers, where he worked for the American Military Government. In Cambridge there were all kinds of furious refugees around. We were rationed for sugar and milk and couldn't afford meat. Victory gardens were started then, and we had to draw the shades every night at 9:30. It was a gloomy, sad time. We were always waiting for the worst news. Once a mailman arrived with a telegram for me and said, 'I've been told to stand by while you open it.' I was trembling so badly from head to toe, the man had to open it for me. It was from a woman whose name I don't remember telling me her daughter, whom I didn't know, had committed suicide."

During those years Molly and her children spent the summers on the North Shore—Manchester, Annisquam, Beverly Farms. They would stay in a house or hotel, with the in-laws often nearby, and pass their days on the beach. In towns so saturated with the rewards of big money—hotel-sized houses and trees on long lawns that sloped down toward the Misery Islands—the Howes consorted with the rich.

"They weren't rich themselves," Molly said, "and they weren't greedy either. The old man was a snob, though he was also well-meaning. His wife said he liked too many people and meant too well. She also said that her children were as short as they were because the old man's father, the bishop, had no legs."

Molly came to terms with her in-laws, and they with her, but she could never forgive them for neglecting her own mother, who had visited her just before the outbreak of the war. She interpreted their neglect in the class terms of a society she had left behind. "Because Mother wasn't titled," she said, "they took her nowhere and introduced her to no one." And she also admitted to some irritation at being exploited for her Irishness. Her sister-in-law, Helen, a performing monologist at the time, loved the Irish songs that Molly used to sing. When Molly taught them to her, she said, Helen "became the one in the family who was asked to sing them for everyone. Not me." A sense of being neglected, or misunderstood, stayed with her over the years and was often explained in terms of a Victorian class structure that did not exactly coincide with the American scene. At the same time she always wanted to be sure that people knew she was not one of the Irish folk arrived from a thatched cottage, with shamrocks stitched into an apron. Those stereotypes offended her, along with other forms of arrogance that may have been more English in origin than American.

During the war, however, drawing on her intimate knowledge of Dublin, Molly produced an original version of *Finnegan's Wake* which would later evolve into her successful play, *The Voice of Shem*. She also wrote a play and a novel. Harry Levin, the brilliant scholar of James Joyce, was vital to her as a critic of her work; so was the criticism of other intellectuals, like Jack Sweeney, the curator of the Lamont Poetry Room at Harvard, and Matthiessen. Given the caliber

of intellectuals who had not gone abroad, there was a lively audience for her productions in Cambridge.

She did not have much time with her daughters. Those Sunday visits to the grandfather on Beacon Hill were, therefore, important to the three of them. While Molly and the old man talked, the girls would huddle in the bedroom off the kitchen with Mary, reading the Sunday comics, or would stare through the long windows onto Louisburg Square. The sense of the missing person—the father—trailed them everywhere. After the lunch, the three would walk back down Beacon Hill, along Charles Street to the iron staircase going up to the elevated subway stop. From there they viewed the gray fortress of the city jail, and the river flowing to the harbor. Beacon Hill itself was a simple brick cluster with the gleaming bosom of the capitol building at its top. When the snow came, the blood-red walls of the city grew white and the ice on the river was a stiff winding-sheet. The sky seemed a permanent firmament: a thunder-colored replica of the heavenly gates.

Mark, meantime, had left behind his work on the letters and life of Oliver Wendell Holmes, as well as his family. He was thirty-seven. He had been to Europe only once before, as far as Ireland, where he had met his in-laws. He was known to have a dread of travel. Now he started in Algiers as a major and moved later through Europe and to Potsdam finally, where he became a colonel. Tiny aerogrammes arrived with great frequency at Craigie Circle, along with hand-written and novelistic accounts of his days abroad. He shared with Molly his missing of her and home, but also, in some depth, his political responses, his views on the history being made. In the summer of 1943 he wrote to her from North Africa, now a military occupation zone where the Anglo-American forces dwelled together. It was during the same summer that Mussolini fell from power, the Anglo-American forces invaded Sicily, and DeGaulle rose to power.

From North Africa he wrote:

I wish I had more freedom in these letters than I'm allowed. But even if I had there would be little of interest to say. The striking thing so far is how the simple things are most moving—a few impressions will stay with me always—the troops on the lower deck of the transport singing *For Those In Peril on the Sea* and *The Star Spangled Banner* as the sun sank over the horizon and the blackout began, Negro boys from Alabama and Chicago and Buffalo playing baseball on dusty diamonds on the African coast, and hanging over the vast majority of us a choking homesickness and a new appreciation of all the familiar devotions and scenes. . . . But the thing about this experience that is most noticeable is its mass quality. There are, of course, a mass of sordid accompaniments—drunken soldiers and sailors in town—rushing after breakfast to my period of meditation on a beautiful hilltop overlooking the blue Mediterranean with my throne in the completely open air & ten other thrones each with a grunting king reigning over the ruins of the empires of old and the excreta of today. . . . For 4 days & 3 nights—& with one of each still coming—I've been in a train. At first we were travelling in what is called first class where lice, fleas, heat, food from tin cans, & dirt were the steady diet. We then moved up one peg in society into a freight car for 30 men or six horses, but were fortunate in having no horses sharing our sordid floor and only five of us—with all our baggage to wallow with in our luxury. You can imagine some of the discomforts of such a life—but the experience on

the whole has been rewarding. Last night, however, we really thought the game was up when the rickety train got out of control going down a mountain side. For what seemed like an hour, but was probably no more than ten minutes we roared along at 70 miles an hour, with flames leaping from the brakes, Arabs jumping overboard from their posts at the brakes. It was not reassuring as we hurtled through the moonlight to see forty cars strewn along the embankments, having run into similar trouble a few weeks ago. Finally, and just as in one of the old Westerns, we came to a gradual halt. I really think I've never been so scared in my life. There's a crowd of British troops on the train besides these officers in my group—they are simply incredible as regards their tea. All assigned to freight cars—with no facilities for cooking they nevertheless manage every day—at least three times, to take enormous wallows in their indispensable stimulus. Their device is to rush up to the engine at every stop and fill great cans with water from the boiler. Anything to drink has been so scarce on the journey that I have even found myself forming in line at the regular intervals. I suppose it's nothing but crass sentimentality that makes me almost cry with delight when in some outlandish village with an outlandish name we run into a little group of American troops working on the railroads. Their universal quality of friendly equality horrifies the British officers, no less than does the obvious delight with which the other American officer and I rush to these privates. It was like reaching mecca to walk into a cook shed in one of the stations the other morning and to share with a pair of railroad privates from Texas and Alabama their breakfast of fried egg sandwiches &, for once, coffee. The British officers evidently thought our conduct most unseemly.

Meanwhile the drama of New England was enacted on the streets of Cambridge. A fundamental sense of security made thunder into orchestration and blizzards into paper confetti. The area directly surrounding Harvard Square was little and luscious. Trees and shrubs huddled protectively around antique houses. In the spring, honeysuckle, violets, lily of the valley, wisteria, lilacs, tulips, and daffodils hung into the brick sidewalks. In the winter, the arms of the trees crackled inside ice sleeves or sank politely under snow. From the fall storybook, images of red and yellow leaves tumbling into piles, where they were burned on private lawns, accompanied the children on their way to school. And Molly walked home, blithely alone, at midnight from work at Radcliffe.

Many evenings she would have friends at home and they would sit close to the hot body of the radio; its orange light from candletip bulbs in back might have been the glow of bonfires from across the ocean. When the blackouts occurred in Cambridge—practice air raids accompanied by sirens—the radio played on. In terror the children heard the names recur: Afrika Korps, Rommel, Ribbentrop, Molotov, Brenner Pass, Dieppe, Vichy, Mussolini. When Hitler's voice emerged from the box—rasping and mechanistic—it was like something broken that keeps running anyway; it was out of control. An old man played a hurdy-gurdy on the streets of Cambridge all through the war. Flowers garlanded his organ. A legless beggar sat outside Woolworth's, in all weather protected by his striped awning, his board-on-wheels parked beside him and a hat for falling small change.

Fear and religion stayed at the periphery of Harvard Square, but both were tangible in other areas. The children were aware that their sitter, Ruby, and the maids who arrived at friends' houses approached their neighborhood from

Mount Auburn Street, where the trolley rolled from Boston out of the Harvard Square station, or from Huron Avenue, where there was a large Irish population. They were aware that these women had sons in action who were actually being killed, abroad, and that they were serious, and therefore mysterious, in their devotion to a divine presence. Church attendance, rosary beads, and small asides directed to the Lord gave this truth away. The number of young men killed in action who were sons of these working women was staggering in comparison to the losses suffered by the intellectuals and the rich; they were not all Irish.

A young black soldier from Cambridge would enlist, fight, and die in a segregated unit. He would know that in spite of a pressing need for army pilots, only a minimum of those accepted would be black. He would know that the treatment of black Americans in uniform included attacks on public carriers that they were on and the inability to enter a restaurant two blocks from the White House. The young black soldier from Cambridge might know about the fellow GI in the Pacific who asked to have written on his tombstone, "Here lies a black man, killed fighting yellow men, for the glory of white men." He might also say, as did a little girl when asked what the best vengeance against Hitler would be, "Make him black and make him live in America."

All this was part of Cambridge, too. The children were subliminally aware that manual labor and faith went together. Their uncle, Willard Sperry, had faith but it was different in expression, harder to catch. Occasionally Molly would take the children to Memorial Church in Harvard Yard to hear him preach. There his wife, Muriel, an anarchic nonbeliever who had immigrated from Dublin years before, rattled wax paper and cookies and whispered to the children as he spoke. She had won a Gold Medal at Trinity College for her work in Greek and Latin studies. Now her constant companion in Cambridge was the renowned scholar of Saint Paul, Arthur Darby Nock, who ate a lamb chop every night, wore high collars over shabby suits, and spoke in a thick, sputtering English accent. The children sat pressed between these relatives and friends, all speaking the Queen's English, and listened to their uncle over the crunch of their teeth on cookies.

"Modern liberalism," Sperry said in one wartime sermon, "has been, at certain points, in advance of the human fact. In particular, it has tried to assure men that there is nothing in the world to be afraid of and that we may now safely dispense with fear as an outworn motive for conduct. . . . The dean of St. Paul's in London was in this country not long ago, and he told us that although we did not yet know much about such matters in America, we should never understand the mind of Europe until we had envisaged whole populations haunted by fear, a naked dread of what yet might happen. Youth, he said, has insisted on putting back into the litany the petition which its too liberal fathers had prematurely taken out. 'From battle, murder and sudden death, Good Lord deliver us.' "

The influence of England was omnipresent and served as a bond for Molly with those who, like Arthur Nock, understood what it meant. (Years later, before Arthur Nock died, he named Molly as his next of kin and requested that he be buried beside the Sperrys in the Mount Auburn cemetery.) Outside Memorial Church, though not on Sunday, the navy was training, and an Army Chaplain School settled in at Harvard in 1942 before being sent to nearby Fort Devens. Sermons about war and fear had a context in which to grow and make sense.

Where Harvard had, before the war, emphasized the social sciences and humanities, now it stressed the natural sciences, including defense-related research, which would, finally, lead to the atomic bomb.

During the war James Conant was president of Harvard and Roosevelt was president of the nation. Many of the academics who were committing their ideas about American law and literature to paper had grown up as New Dealers. Some had in their youth gone as far left as the Communist party and would, in the forties and fifties, suffer for this. Some had been America Firsters before the war and later would not be allowed to enlist. But most were simply ardent supporters of Roosevelt and his programs for reconstructing the economy after the depression. They were unprepared for the blows to their faith in American democracy which accompanied the war and its aftermath, and they began to reassess the American past simultaneously.

During the war an American Studies program was initiated at Harvard, and American literature, minimized always in proportion to that giant, English literature, was given new, admiring attention. F. O. Matthiessen was particularly involved in this revival. Too small to serve in the army, Matthiessen was politically to the left and socially conservative. He lived with his cats on Beacon Hill and was a favorite at dinner parties. He helped introduce a tutorial system at Harvard which was modeled on that of the English universities, believing as he did in the pure pursuit of "wisdom" as opposed to information. At the same time he was involved in the Harvard Teachers' Union and was passionate on the subject of democracy, using the language of socialism to state: "In a democracy there can be but one fundamental test of citizenship, namely: Are you using such gifts as you possess for or against the people?"

His great critical work, *American Renaissance*, was devoted to understanding the five major (as he saw it) writers of the nineteenth century—Whitman, Thoreau, Hawthorne, Emerson, and Melville—not only in literary terms but in economic and political terms as well. The measure of a writer, for Matthiessen, was the degree of his or her commitment to the American vision of a Christian democracy. While he was electing Melville as the one who best understood the tragic consequences of individualism and establishing Emerson's "will to virtue" as an ominous will to conquest, he saw Germany acting out, in horrific proportions, this will. He also saw, and was appalled by, professionals and specialists in a growing defense industry moving in to the university.

Meanwhile, in the private schools in Cambridge, the nineteenth century was preserved intact; that is, the English Victorian view of the world. The children studied Latin, French, and English history; they read the novels of Jane Austen and the Lake poets as if nothing had changed. In the girls' schools *Moby Dick* was called "a boy's book," just as it had been by turn-of-the-century critics. In geography classes there were maps of South American countries, of India, Africa, and Asia, where each territory was pictorially described by its product—grain, oil, fruit, tobacco, and so on—not by its people or their culture. American history was hurried through, with contempt, as if to suggest that it was crude in comparison with the history of the British Empire.

At home Molly talked to her children about her mother, sister, and brother John in Ireland, but she had only paper evidence for their existence. John would

write, sending mysterious drawings in ink to the girls; they were pictures of an Irish sky, clouds like hands and fingers rising over a hilly horizon. Molly herself referred frequently to the sky, interpreting from its texture and tone a myriad of possible moods, most of them bad. This relationship was one that the girls understood to be peculiarly "Irish" about her. Her mother, their grandmother, sent a bunch of shamrock by mail, pressed in crinkled transparent paper; she also sent lace. The war waged by Britain, so close to Ireland, must have waved from the rim of the sky like those purple hands that John drew as clouds. As time went by Molly became, like many others, increasingly impatient of the continuing violence, whose ultimate holocaust had not yet been exposed. The isolationist instinct of the American was not foreign to her. While the Irish left Ireland in droves, they didn't leave it with aggressive intentions but with the nostalgia of the obedient seeker and the resigned.

Molly's admiration for the Soviets made her delight whenever Mark, in one of his letters, expressed his sympathy for the Italian underground and the leftists. She was asked out frequently to those dinner parties in Cambridge and Boston which maintained a male-female ratio even when so many of the men were gone. There the talk was of war and Harvard politics, literature and art. Helen Howe, Molly's sister-in-law, traveled around the country giving satirical and riotous monologues on national character types, but her base was on Beacon Hill and her home was a center for lively dinners. Those evenings, when the adults gathered over dinner, Mark and Molly's daughters lay at home in the dark in the room they shared and watched the branches scratch on the windowpanes and lights drift by like fairies across the ceilings and walls. They imagined the father they didn't know at all, who sent them aerogrammes filled with extraordinary humor. Each daughter had an imaginary male companion in those years. To one he took on a giant's proportion, to the other an elf's—he was so small, that is, he lived in a mailbox. These imaginary lives were told in whispers in the night.

One cold white morning in December 1944, there was a knock on the apartment door as the three were sitting down for breakfast. A man called, "Paper!" Molly, dressed in her nightgown, went to see what he wanted, convinced it was money. When she opened the door, Mark was there in uniform, carrying a small army bag and packages. He was not very big and not very small. His eyes were deep set and bright blue, his posture soldierly, his manner shy, as he was invited into the home he had never seen before.

The introductions were made and the children told they could stay home from school. For the whole morning the family circulated around the table, with the presents he had brought them, and with their eyes riveted on the others' faces. It wasn't until he had gone out and come back a few times that the sense of his belonging there at all began to sink in. He did not, however, stay long in Boston, but only made the round of contacts with family and friends before moving on to Washington and back again to Europe. On December 3, Matthiessen wrote to his best friend, "Young Mark Howe (a Lieut-Colonel with AMG) is just back from France, and Helen gave a little party for him. It is fine to see a firm and resolute believer in democracy, who has been doing the best job he can."

Molly was increasingly unhappy with the protracted separation between them, as was Mark. But over and over again he communicated his certainty that his absence from home was a necessity, that "the quality of misery is probably more

important than the fact of unhappiness." The misery, in other words, was justified by its cause; this was a theme that would run through his life. He even went so far as to confess to his sister, Helen, that he found "considerable satisfaction, with all the outward despair," in those years abroad during the war. (Years later, seated aboard a schooner off the coast of Maine, with rum and a sunset adding to the glory of the scene, he would remark to his friend Donald Starr: "I wonder if I should be unhappy because I'm happy or happy because I'm unhappy.")

That firm and resolute believer in democracy was, through the war, catapulted out of the minor dimensions of personal history into an arena where new ways of measuring acts and facts became necessary. His future job prospects in America were uncertain, and he was not irresistibly drawn to writing the biography of Oliver Wendell Holmes, the task which awaited him whatever else might happen. He kept promising Molly he would try to be released from duty as soon as he could, while also insisting that he would stay as long as he was needed there.

On July 21, 1945, from the Potsdam Conference, he wrote:

Here the day has been not unlike most others, but there were long conferences in the General's office on Germany, with a recently returned economist telling us something of the gloomy prospects ahead. And I confess that they are gloomy. We seem to have embarked on a program which is bound to fail—we have undertaken to provide the Germans with a minimum standard of living, committed ourselves to the industrial demilitarization of Germany, and undertaken to persuade our own taxpayers that there will be sufficient industrial experts from Germany to pay for the wheat, medicines, etc. which are imported into Germany to prevent starvation. When the Russians transferred eastern Germany to Poland they cut off 25% of the food resources of Germany, and they made inevitable the emigration from the new Poland of millions of Germans who don't want to be Poles. The total result of all this is that we can't possibly expect Germany to live on her present resources, we must send a lot of imports into the country to prevent wholesale starvation, and unless we permit the revival of German heavy industry, and the resurrection of that threat to the peace, we cannot possibly refund ourselves for the goods which we send in. The choice will thus have to be made between abandoning our program of demilitarization and paying out millions in US taxes to feed Germans. In the meanwhile, as you may have noticed in the papers, for humanitarian and commercial motives mixed, the British movement to let German industry get back on its feet is mounting every day. Against this background of virtually insoluble riddles, the American public with fury is demanding the immediate demobilization of the Army and the return of all their sons and husbands to the USA—thus weakening enormously our bargaining power vis-a-vis the Russians, French and British. It looks very much as if all our paper promises and resolutions to play a part in the world are going up in smoke. As I have long anticipated the American's provincialism and homesickness is much stronger than his sense of global responsibility.

This despairing letter was written five days after Secretary of War Stimson received a cable memorandum announcing the first test of the atomic bomb in New Mexico. On July 24 at Potsdam Truman casually mentioned the bomb to Stalin, who replied, "That's fine. I hope you make good use of it against Japan." The Red Army was tightening its hold on Eastern Europe and Stalin had plans

for helping the Allies end the war in the Pacific, at which time he would share the spoils. The British electorate, appalled by the destruction wrought by the war, chose the Labour Party over the Conservatives, confirming a decided backlash against Churchill.

The British playwright Bernard Shaw—elucidating Molly's skepticism in Cambridge—wrote in 1945:

“As to rebridging the rivers the Allies have made impassable, rebuilding the cities they have reduced to heaps of rubble, replacing the locomotives they have smashed, training craftsmen and professionals to do the work of those they have slain, feeding the millions they have left destitute; in short, repairing the damage by war which has reduced itself to absurdity, not a blessed word. Nothing but fairy tales. . . . Lublin has beaten London hands down; and Washington has looked on, not knowing what to say.”

Indeed, back in Washington, where Mark worked in the Civil Affairs Division of the War Department, postwar politics and problems were rife. Victory brought with it a blast of ashes. The Americans wanted to get home as fast as possible and the British felt the war had lasted two years too long. The world was being literally reconstructed, like a face in surgery. Europe, Indo-China, Palestine, South-West Africa, Anglo-Egyptian Sudan—all these areas and many more were reviewed, as if history and territory had become one thing which could be possessed and manipulated by a happy few, the new superpowers. American universities were urged to become involved in this activity, to begin to operate as reservoirs for potential specialists in foreign affairs.

In the midst of this chaos in Washington, there was a proliferation of initials to refer to committees, organizations, and individuals, suggesting a network of coding and secrecy that had evolved over the war years. Narrating his experience in training a successor to his job in the Civil Affairs office, Mark wrote to Molly, who was still awaiting his return to Cambridge:

When I talk about SWNCC, JCS, JCAC, CCS, CCAC, SFE, IPCOG and draw a chart showing how a paper moves from SWNCC to SFE to JCAC to JCS to CCS to CCAC to CCS and on to SACMED, CINCAFPAC, USFET, COMGENCHINA CHUSFA or SCAP and then back up to tell him that before it went from SFE to JCAC we have to go to OPD and ask ASW for a clearance, making *sure* that the policy is approved by Hilldring, the State Department and FEA, he naturally begins to wonder whether he wouldn't have done much better to stay on with the US Group CC (Uncle Sugar Group Charlie Charlie).

Soon Mark was allowed to return to Cambridge as a professor of law at Harvard. Here Wasp eggheads and Jewish intellectuals were the superpowers. The Square, small-town and provincial in its commercial fare, gave little sign of anything unusual going on. The stores could be transported to Main Street, Anytown, America. Students and professors sat around in brightly lit, greasy coffee shops; an English muffin and jelly, tomato soup and a sandwich on white bread, bitter cups of coffee in thick white cups—this was the most common food for thought. The wives did the shopping, often by phone, and met for lunch or at women's clubs while maids let the children in from school. The parent who drove

the children to school in a carpool ordinarily smoked all the way there and back, whirling gusts of Philip Morris or Chesterfield nicotine into the children's faces. Cocktail time was a twilight mystery play enacted on a stage called the living room. Only later did the children understand that the point of this ritual was, quite simply, to get high.

At the end of the war, Molly—unusual as a working wife—decided to quit her job at Radcliffe, and Mark worried over the decision, saying, “The one thing which I don’t want you to do is go to seed as Cambridge wife and mother. Mrs. [Alger] Hiss said the other night that Cambridge is completely a man’s town, and I’m very much afraid that it is for the women who don’t have some occupation of their own.”

Molly did resign, however, in favor of writing fiction and plays. Literature, an institution as much as prejudice and history are, would remain grounded in Europe for her. No matter how strenuously she worked to seduce an American reader, it was really an Irish audience she heard at the end of her imagination. This double self, like an echo, was a continuing distraction for her, as it was for so many people coming to America and learning a new language. As an Irish Protestant, with a system of class and nationality rigorously defined in nineteenth-century terms, she would never be comfortable with the American writers whom her friend F. O. Matthiessen extolled. American ideals rolled back and away from her like foam on the ocean she traveled back and forth across. She didn’t understand them half as well as she understood the socialism that had its fecund base in G. B. Shaw’s London.

In the summer of 1947 Molly and the children stayed at the old man’s flat in Louisburg Square late into one night and then were transported by taxi to Boston’s Logan Airport. They gave their tickets at the gate, where they were photographed by a newspaperman. It was a human interest story: one of the first civilian flights was taking the two girls to Ireland to see their grandmother, aunt, and uncle for the first time. Molly, after that long separation, was returning home at last. They crossed the tarmac in a salty breeze from Boston Harbor and boarded the darkened plane. A moon-shaped porthole framed the white moon swathed in clouds. On board the plane were a great many clerics and nuns and only a few civilians. Rosaries rattled under the whisper of Hail Marys as the plane bumped along the ground to takeoff, then leaned out over the black sea.

There was a lot of retching and vomiting, bellyaching and ear-aching all the way to Gander in Newfoundland, where the plane was stalled for twenty-four hours, owing to engine trouble. The popular songs were “Five Minutes More” and “I Wonder, I Wonder, I Wonder” and they played relentlessly from Boston to Gander and even at Shannon Airport, where the plane dropped gently down over the heads of cows onto the ground. The isle was indeed emerald, the airport smaller than South Station in Boston, and the air as soft as a baby’s breath. The children wondered if shamrock and clover were the same, since both were said to be lucky, as was the whole green swell of Ireland ahead of them. They were herded into a bus, all questions unanswered, and headed for Dublin, where the clouds were lower than they were in America. Meanwhile back in Harvard Yard experts were already rewriting history in order to rewrite the future. The history of the world was being transformed, and that history, like a fiction, being totally invisible, was probably, as Melville said of all that is invisible, formed in fright. 🍀

Demographic Trends in Boston:

Some Implications for Municipal Services

Margaret C. O'Brien

The City of Boston is gaining in population during the 1980s, after several decades of loss. During the current decade and beyond, population trends will bring increases in the number of children, adults between the ages of twenty-five and forty-four, and those aged seventy-five and over, along with declines among the older teenagers and college-age population, the more mature adults, and the younger elderly. A recent analysis of the income distribution indicates that while there were more well-to-do residents in Boston in 1985 than there were in 1980, there were also more poor and near poor. Average family income has declined in real terms during this five-year period, whereas it has increased for unrelated individuals. Minorities, children, and the elderly are more likely to be living in poverty than other segments of the population. Related to this, single-parent families and those who live alone contribute the largest share of families and unrelated individuals in poverty.

The implications of these trends for two areas of municipal services—health care and education—are examined, because these services are especially responsive to demographic pressures. Data on health insurance coverage cite the need of the poor for health services. This need might be met by rebuilding Boston City Hospital or by alternative health insurance coverage plans. Among Boston's public school children, a high proportion lack strong economic and familial support systems. The schools need to assess the extent to which, within the constraints of a limited budget, they can serve the very needy and those who seek a high-quality education.

The City of Boston exemplifies the resurgence that is occurring among a number of older cities in the United States. During the past decade, there have been several indications of turnaround in Boston. The growth in office space and jobs is testimony to a vibrant economy. The growth in the college-age and young adult population indicates the appeal of Boston to the young and the

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young in spirit. Continued growth in minorities, lower vacancy rates, and rapidly rising housing prices attest to the desirability of Boston to many as a place to live. Moreover, there is evidence that the population as a whole is growing again, after a long period of loss and stagnation.

This article identifies some of the pressures that changing demographics may be expected to bring to the delivery of municipal services. Changing demographics always have a general impact on the provision of clean water, waste disposal, and public safety, and on environmental issues. However, in Boston this phenomenon will have specific impacts on public education, health services, housing, and the social services available to the poor and unemployed.

Also described in this article are the ways in which demographic change will shape the demand for services in the City of Boston. The data used are a combination of population projections prepared for Boston City Hospital and the results of the 1985 Household Survey, which was conducted by the Center for Survey Research of the University of Massachusetts under the direction of the Boston Redevelopment Authority (BRA) and the Neighborhood Development and Employment Agency. They reveal clear, overall trends that have important implications for the provision of municipal services.

Demographic Change

Population Growth

For the first time over the course of the past few decades, Boston's population has grown in the 1980s. Boston may grow as much as 3 percent during this decade. It may grow a little faster during the 1990s, if the dynamism of this population growth catches hold and the appeal of features that currently attract young adults is broadened or augmented to attract other age groups. Growth also depends on having a sufficient number of housing units for these people, as well as a level of municipal services that will appeal to a wide range of ages.

Age Composition

The primary trends in the changing age composition of the population between 1980 and 2000, as shown in table 1, are an increase in the number of children, a decline in the number of older teenagers and college-age persons, and a substantial increase in those between twenty-five and forty-four years of age.¹ The number of mature adults declines to some extent during the 1980s and increases in the 1990s. The younger elderly, persons aged sixty-five to seventy-four, decline in numbers, and those seventy-five and older, the more elderly, show some increase. This results from the humps and bumps of the baby boom and bust as they work their way through the age distribution. The largest change is in the younger working-age population between twenty-five and forty-four years old, with some of that group moving into the over forty-five group as the baby boom ages. The growth among children is due to births long delayed among baby boomers and to an increasing number of minority children.

The distribution of population by age, as shown in figure 1 on page 78, peaks at the twenty- to twenty-four-year age group and declines sharply through the young adult age group. By the year 2000, the peak flattens out, indicating the larger number of persons throughout the young adult years.

Table 1

**Population of Boston by Age Groups
in 1980, 1985, 1990, 1995, and 2000**

	1980	1985	1990	1995	2000
Age Groups	Population (thousands)				
All Ages	563	571	579	587	599
0-14	96	92	98	106	108
15-24	137	129	107	94	100
25-44	160	190	215	221	209
45-64	99	90	87	95	112
65-74	40	38	37	35	31
75 +	31	32	35	37	39
	Percent Distribution				
All Ages	100%	100%	100%	100%	100%
0-14	17	16	17	18	18
15-24	24	23	18	16	17
25-44	28	33	37	38	35
45-64	18	16	15	16	19
65-74	7	7	6	6	5
75 +	6	6	6	6	6
Age Groups	1980-1985	1985-1990	1990-1995	1995-2000	
	Percent Change				
All Ages	1.5	1.3	1.4	1.9	
0-14	- 4	7	8	2	
15-24	- 5	- 17	- 13	7	
25-44	+ 19	13	2	- 5	
45-64	- 10	- 3	9	19	
65-74	- 4	- 3	- 6	- 11	
75 +	3	8	7	4	

Source: Boston Redevelopment Authority, Research Department, "Population Projections for Boston and for Boston City Hospital Neighborhoods," August 1985.

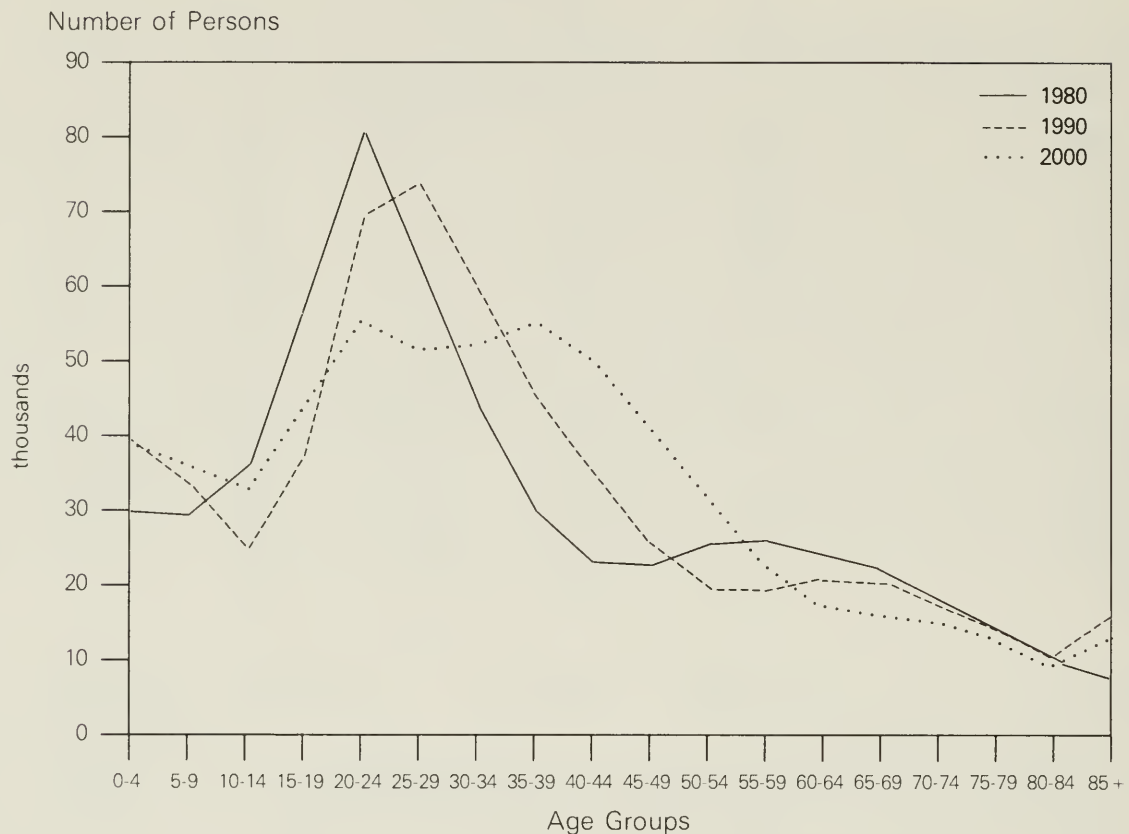
Two primary implications can be drawn from the very large growth in the group consisting of those between twenty-five and forty-four years old. Persons in this age group are important consumers of housing, both rented and owned. The remainder of the 1980s will see an even greater demand for housing as this group grows. Second, the size of this group is important in determining the size of the labor force: it has the highest labor force participation rate of any age group, with some 80 percent in the labor force. So this is an important source of labor in an economy where labor is going to be difficult to find. This group will be growing both in numbers and participation in the decade ahead.

Groups consisting of people younger than twenty-five are somewhat smaller and are declining in numbers, so employers will continue to have some trouble finding entry-level workers in the decade ahead. Evidence of this is now visible in the Help Wanted signs in store windows. To some extent, older workers and retirees may fill the gap. Another source of entry-level workers are unemployed Boston residents. While Boston's unemployment rate is a low 5 percent, the

Figure 1

Population of Boston in 1980, 1990, and 2000

(by five-year age groups)



Source: Boston Redevelopment Authority, Research Department, "Population Projections for Boston and for Boston City Hospital Neighborhoods," August 1985.

unemployment rates for teenagers and for minority citizens under the age of twenty-five approximate 15 percent. Moreover, Bostonians constitute only 30 percent of the workers in the City of Boston, representing a steady decline in the number and proportion of those employed in Boston who also have lived in the city since 1968. On the other hand, currently nonworking mothers may be an additional source of entry-level workers. The 1985 Household Survey finds that among mothers of children thirteen and younger, 50 percent said there was a good chance they would work if they had good day care. Day care might provide an inducement for some of these mothers to come into the work force at the entry level.

The implications of growth among children and the more elderly are somewhat different from those of growth among young adults. Children and the more elderly are our most dependent populations, relying on others. Their needs for health care exceed those of other groups. Education is an essential service for the young. Growth within these age groups implies growing needs for both health care and education, which will be discussed later in this article.

Income

The median incomes and the income distributions for Boston, shown in table 2, indicate that the families of Boston are becoming poorer and that the unrelated

individuals are becoming wealthier. Boston's families were worse off in 1984 than they were in 1979. And they were far worse off in 1984 than were families throughout the United States in the same year. Real family income in Boston has declined in the five years between 1979 and 1984 from \$22,969 to \$21,000. Moreover, Boston's median family income is almost \$5,500 less than the U.S. median family income of \$26,433.

More of Boston's families are slipping into lower-income levels. The proportion of families earning less than \$10,000 a year increased to 26 percent in 1984, from 22 percent in 1979. Nationwide, only 14 percent of families have incomes below \$10,000. Some of the difference in income is due to the large proportion of single-parent families. The income of single-parent families is about half that of married-couple families. Single-parent families constitute 26 percent of families with children nationwide; in Boston, single-parent families make up 42 percent of families with children.

On the other hand, unrelated individuals have had a real increase in income between 1979 and 1984. In this five-year period, the proportion in the rather well-off group, earning \$30,000 a year or more, has increased from 4 to 13 per-

Table 2

**Income of Families and Unrelated Individuals
in Household Population of Boston in 1980 and 1985
and of U.S. in 1985**

		Income Distribution in 1984 Dollars				All Incomes
Families	Median	Less Than \$10,000	\$10,000 to \$29,000	\$30,000 or More	\$45,000	
Boston						
1984	21,000	26	42	32	14	100%
1979	22,969	22	41	37	18	100%
U.S.						
1984	26,433	14	45	41	20	100%
Unrelated Individuals						
Boston						
1984	13,608	38	49	13	6	100%
1979	12,727	57	39	4	—	100%
U.S.						
1984*	11,204	45	45	10	—	100%

*Includes group quarters population.

Sources: Boston Redevelopment Authority and Neighborhood Development and Employment Agency Household Survey, conducted by the Center for Survey Research of the University of Massachusetts, 1985; and U.S. Bureau of the Census, "1980 Census of Population: General Social and Economic Characteristics," PC 80-1-C23. For Boston families, the 1985 Household Survey and 1980 Census data are used. For unrelated individuals, the 1985 Household Survey and 1980 Household Survey data are compared because U.S. Census broad income categories and inclusion of group quarters population, mostly students in dormitories, preclude comparison.

For U.S. families and unrelated individuals, the data used are from the U.S. Bureau of the Census Current Population Reports, Consumer Income, "Money Income of Households, Families and Persons in the United States, July 1, 1984," P-60, no. 150.

cent. In addition, the median for Boston's unrelated individuals, \$13,608, is higher than the U.S. median for unrelated individuals, which is \$11,204. These unrelated individuals, who are in large part working young adults, have done well economically.

The divergence in the income distribution, between a significant proportion of the population living in poverty and small but growing groups of individuals who are better off, shows up dramatically when the trends for families and unrelated individuals are compared. The City of Boston may be witnessing a time when there are some wealthier people living in it and contemporaneously a lot of people who are either poor or near poor. The implication of this divergence in the income distribution is a discrepancy in the expectations for services. The major needs of the not so well-to-do are for access to a decent standard of living, which would include adequate income, jobs, education, and health care. For the better off, the primary concern may be preserving and enhancing the quality of services provided.

Poverty

The 1985 Household Survey gives some information about the poverty status of families, unrelated individuals, and persons living in Boston and the nation, as shown in table 3. The proportion of Boston families in poverty increased in the 1979-1984 period from 17 to 22 percent. The proportion of Boston families in poverty in 1984 greatly exceeded the U.S. proportion of 12 percent. The proportion of unrelated individuals in Boston who were living in poverty decreased from 26 to 17 percent during the same period and is lower than the current U.S. poverty rate for unrelated individuals. Table 3 also shows that overall a higher proportion of persons—21 percent—are living in poverty in Boston than throughout the United States, where the figure is 14 percent. In the past five years, the

Table 3

Poverty Status of Families, Unrelated Individuals, and Persons by Race and Hispanic Origin in Boston and the U.S.

	Proportion in Poverty			
	1984		1979	
	Boston	U.S.	Boston	U.S.
Families	22	12	17	9
Unrelated Individuals	17	22	26	22
Persons	21	14	20	12
White	13	12	16	9
Black	29	34	29	31
Asian	40	NA	NA	NA
Hispanic	50	28	42	22

NA signifies that information is not available.

Based on 2,818 observations (weighted).

Sources: 1980, 1985 Boston Redevelopment and Neighborhood Development and Employment Agency Household Surveys, conducted by Center for Survey Research of the University of Massachusetts; U.S. Bureau of the Census Current Population Reports, Consumer Income, "Money Income and Poverty Status of Families and Persons in the United States: 1984," P-60, no. 149.

white poverty rate for Boston has declined, the poverty rate for blacks has been stable, and the rate for Hispanics has increased.² While the white poverty rates for Boston and the United States are currently similar, minority poverty rates, especially those for Hispanics, are higher in Boston. Fifty percent of Hispanics in Boston are living in poverty, compared to 28 percent throughout the United States. The minority populations, principally Hispanics, Asians, and blacks, have been growing and will make up an increasing proportion of the population of Boston, owing both to natural increase and immigration from abroad.

Minorities, children, and the elderly of Boston are at greater risk of being poor than the rest of the city's population, as table 4 illustrates. Minorities, of whom one-third live in poverty, are two and a half times more likely to live in poverty than whites. Beyond this, it is the youngest and the oldest, particularly the youngest, who are most vulnerable to being in poverty. Children are twice as likely as young and mature adults to live in poverty. The elderly are one and a half times more likely than young and mature adults to live in poverty.

Related to this, the two family types that contribute the largest portion of families and unrelated individuals in poverty are those who live alone and single-parent families with children.³ Each of these two family types accounts for nearly one-third of those families and unrelated individuals living in poverty. The first group includes the elderly, students, those who are starting out, and those who are having trouble making it. The second group exemplifies the feminization of poverty, which has occurred here in Boston as elsewhere.

The plight of single-parent families and the feminization of poverty have received a great deal of national publicity. The problem in Boston is severe and increasing. Of the forty-four thousand families and unrelated individuals living below the poverty line, some fourteen thousand are single-parent families. Another fourteen thousand are unrelated individuals. Women and children consti-

Table 4

**Proportion in Poverty Among Persons Living
in Boston by Age Groups and Minority Status in 1985**
(numbers in %)

Age	White Non-Hispanic	Minority*	Total
0-4 years	18	41	31
5-17	17	44	33
18-24	20	33	24
25-34	8	23	13
35-44	6	22	12
45-54	8	35	20
55-64	11	29	16
65+	21	34	23
All Ages	13%	32%	21%

*Minority includes blacks, Asians, Hispanics, native Americans, Cape Verdeans, persons of mixed racial background, and other nonwhites.

Based on 2,817 observations (weighted).

Source: Boston Redevelopment Authority and Neighborhood Development and Employment Agency Household Survey, conducted by Center for Survey Research of the University of Massachusetts, 1985.

Table 5

Poverty Status of Families and Unrelated Individuals
by Largest Source of Income in 1985
(numbers in %)

Largest Source of Income	In Poverty	Not in Poverty	Total
Work, salary	7	66	73
Rents	*	*	*
Social Security	3	7	10
Unemployment	*	*	*
Disabled or veterans benefits	1	*	1
Welfare, AFDC	4	*	5
Interest and dividends	0	1	1
SSI	1	*	2
Pension	*	2	2
Help from friends, family	1	2	3
Scholarship, fellowship	*	1	1
Inheritance	0	1	1
Other	*	1	1
All Sources	19%	81%	100%

*Less than 0.5 percent.

May not sum to 100% on account of rounding.
Based on 1,402 observations (weighted).

Source: Boston Redevelopment Authority and Neighborhood Development and Employment Agency Household Survey, conducted by Center for Survey Research of the University of Massachusetts, 1985.

tute 78 percent of those in poverty in Boston, compared to 75 percent of the poor nationally.

As might be expected, wages and salaries are the primary source of income for three-fourths of all the families and unrelated individuals in the city (see table 5). Perhaps surprisingly, among the families and unrelated individuals below the poverty line, the largest source of income is again wages; it's not welfare. Some 37 percent of those in poverty are earning a wage, but it's not enough to lift them above the poverty level. While 19 percent of the families and unrelated individuals in Boston are below the poverty level, 7 percent have wages and salaries as their largest source of income. These are the working poor. Another 20 percent are receiving welfare, AFDC benefits, and other types of public assistance as their primary source of income.⁴ However, the working poor are the largest component of the poor.

Municipal Services

Three areas that are responsive to changes in demographics and in income distribution are health care, education, and housing. The pressures of demographic changes on and the resulting dilemmas for formulating policy about the delivery of these municipal services are of significance to business as well as government.

The 1985 Household Survey yielded other information about city services, their effectiveness, and some of the policy issues surrounding them. The quality of city services is not an attraction and may be a deterrent to people moving

into and staying within the city. Less than 1 percent of Boston residents interviewed said that services were the primary reason for their choice of current residential location. Access to location (26 percent), familiarity or social involvement in the area (25 percent), economic factors (12 percent), and other constraints (6 percent) were cited by respondents.

Among those who are likely to move in the next three years—inside or outside of Boston—the primary reasons are changes in housing needs and in job location. However, beyond these two main causes, interesting differences occur among various population groups. The sample data for those who said they were likely to move in the next three years were divided according to annual income, above or below \$25,000; two family types—single persons or married couples with children; and probable destination. The data indicate that the reasons for moving that are next in importance for those earning \$25,000 or more tend to be quality issues—the quality of housing, the quality of the physical environment in the city, and the quality of Boston's schools. For some, city services may act as an impetus to leave. Among families who have school-age children, are considering moving to the suburbs, and earn \$25,000 or more, 25 percent named the quality of the schools as their reason. In contrast, those earning less than \$25,000 a year were concerned with issues related to the affordability of housing.

Health Care

The 1985 Household Survey asked about health insurance coverage and health services needs in Boston. Some 75 percent of Boston residents have health insurance coverage, either private or through Medicare, and another 11 percent have Medicaid coverage, as shown in table 6 on page 84. Fifteen percent have no coverage, which includes 11 percent of those not in poverty and 26 percent of those in poverty. Almost half of the 11 percent of those above poverty who are not covered by health insurance are young adults between the ages of twenty-five and forty-four. Those in poverty who are uncovered tend to be concentrated in younger age groups, along with some mature adults. All in all, some 40 percent of Boston residents not covered by health insurance are living in poverty. Most of these people are children and young adults. So there is a significant group of people who are both poor and uninsured. This group is likely to use the services offered at Boston City Hospital.

As the city considers building a new Boston City Hospital facility to better serve the poor, questions arise as to who needs these services and what is the best way to serve the poor. While need can be identified, it is more difficult to provide good care to the poor efficiently, in a way that minimizes both the costs and the risk that the poor will be without care in the future. Boston City Hospital has been a long-time symbol for the poor of the city's guarantee of their access to health care. Now a major capital expenditure is needed to rebuild it, even if the new facility were somewhat smaller than the current one. BCH would then continue to work with satellite health centers, as it has in the past, to serve the needy.

On the other hand, possible alternatives to rebuilding exist. One such alternative might be a universal health insurance coverage program. It could be funded publicly or privately, through new or enlarged insurance pools. Then the beds that exist in private hospitals and in other kinds of facilities, some of which are

Table 6

**Poverty Status by Health Insurance Coverage
of Persons in Boston in 1984**

(numbers in %)

Health Insurance Coverage	In Poverty	Not in Poverty	Total
Private or Medicare	35	86	75
Medicaid only	39	3	11
None (no private, Medicare, or Medicaid)	24	11	14
None (no private or Medicare; Medicaid eligibility unknown)	2	*	1
None (no private or Medicare; not Medicaid eligible)	*	0	*
Total	100%	100%	100%

*Less than 0.5 percent.

May not sum to 100% on account of rounding.

Based on 2,734 observations (weighted).

Source: Boston Redevelopment Authority and Neighborhood Development and Employment Agency Household Survey, conducted by Center for Survey Research of the University of Massachusetts, 1985.

empty, could be used. Perhaps there would be a voucher system. These ideas warrant thinking about in political and social terms as well as in dollar terms.

Education

A second area in which demographic pressures impact service delivery is public primary and secondary education. Table 7 profiles the characteristics of those who are currently being educated by the Boston Public Schools. Almost three-fourths of these children are minority. Some one-quarter are white non-Hispanic.⁵ Half of these children do not live in a family with two parents. Instead, they live with a single parent, with a single parent and others, with another relative, or with unrelated individuals—a foster care situation, perhaps.

In terms of income, some 55 percent of the children currently enrolled in the city's public schools live in families that earn less than \$15,000 a year. Forty-five percent live in poverty. Two-thirds of the Hispanic pupils are living in poverty. Again the working poor are evident: wages and salaries are the largest source of income for a large majority—72 percent—of students' families, but they are not enough to lift these families above the poverty level. Twenty-four percent of pupils are supported principally by AFDC and other types of public assistance. At the same time, there is a substantial proportion of black and white students whose families earn \$40,000 or more per year—20 percent among whites and 7 percent among blacks. This is noteworthy because, using income as a rough indicator, in the midst of the neediness of the school-age population there are some people who would be able to afford other schools if they were dissatisfied with the quality of the public schools in Boston.

The differing educational needs of students and expectations of parents and society for these children point to some issues that the public schools are trying to address; for instance: the high cost of educating children who lack strong familial and economic support systems; the cost of the mandated programs for

Table 7

**Profile of School-Age Children
Enrolled in Boston Public Schools in 1985**
(numbers in %)

	Race and Hispanic Origin					Total
	White Non-Hispanic	Black	Asian	Other	Hispanic	
Racial Distribution	27	43	6	4	19	100
Total	100	100	100	100	100	100
Married-couple family	53	42	72*	72*	49	49
Family Income:						
Less than \$15,000	38	53	NA	NA	78	56
\$40,000 or more	20	7	NA	NA	0	9
Largest Source of Family Income:						
Wages, salary	83	77	NA	NA	57	72
Welfare, AFDC, disability, unemployment	11	21	NA	NA	38	24
Living in Poverty	28	40	NA	NA	66	45

*Average for groups indicated.

NA signifies that information is not available.

Based on 320 observations (weighted).

Source: Boston Redevelopment Authority and Neighborhood Development and Employment Agency Household Survey, conducted by Center for Survey Research of the University of Massachusetts, 1985.

special education and for bilingual education; the quality of the outcome of the educational process and how it is being measured; the extent to which the schools can both serve the very needy and simultaneously serve those who seek high-quality education—and the question of how this can be accomplished within a limited budget. For, in a very real sense, the schools hold the key to providing a labor force with basic skills, providing individuals with the skills to earn a decent living, and retaining the middle-class families in Boston.

To digress for a moment, Boston's resident labor force is sophisticated. Over one-third of its constituents have professional, technical, or managerial occupations. Over 80 percent of those between the ages of twenty-five and forty-four are in the labor force. Unemployment stood at a low 5 percent in the spring of 1985. Yet minority unemployment remained higher (9 percent), especially among youth (15 percent), indicating that among both those who move to Boston and those who are products of the Boston school system, many lack the skills to compete effectively for jobs. The efforts of the Boston business community through the Private Industry Council (PIC), Boston Works, the Boston Compact, and the ACCESS program are very significant.⁶ However, many of these young people need to develop better skills and more discipline in order to find and hold jobs. Indeed, another policy issue is how much support, in terms of social services, is given to aid families as these young people are growing up. The Boston Housing Authority (BHA) is now trying to assess some of the needs of its tenants, but certainly the day-care issue, the job training issue, and the basic skills and education issue are critical.

Housing

The shortage of affordable housing in Boston is another issue that has been receiving attention. A number of factors have combined to create a very tight housing market. For instance, household formation by the baby boomers is currently peaking, as college-age and young adults leave their parental homes and set up new households. They have about reached their maximum impact in terms of housing consumption. Given that construction during the 1970s went at a slow pace, that thousands of private apartments were converted into condominiums, and that the BHA has not put all its units back in service and has mothballed some of them, it is very difficult to find public housing or affordable private apartments—not as many units are available for rental in either the public or the private apartment stock as there once were. The stock of private apartments has gone down by 7 percent at the same time that a lot of young people are seeking rental units. This has sent vacancy rates tumbling to 4 percent and even as low as 1 percent in some neighborhoods. Moreover, the cost of housing has risen very rapidly. The average sales price for one- to three-family units increased by 140 percent between 1979 and 1984, or by more than 100 percent in constant dollars. During this time, the median contract rent increased by 25 percent in constant dollars. The budgets of all renters are being severely pressured by these increases.

The city is now engaged in an effort to ascertain the extent of the current need and plan the best way to obtain more units of affordable housing. The possibilities for increasing the number of affordable housing units include linkage; rehabilitating city-owned abandoned housing and mothballed BHA units that the BHA lacks the money to put back in shape; finding a less expensive way to increase the stock through rehabilitation—perhaps a housing voucher system, rent control, and subsidies and tax breaks for private builders; and possibly creating additional smaller units from larger units. This last option is largely conversion of larger homes and apartments. The various possibilities warrant careful consideration because of their budget implications for the city.

Conclusion

During the 1980s, the first decade of population growth in Boston since the 1940s, the age structure of Boston's population and the income distribution are changing. The primary trends with regard to age groups are toward an increase in the number of children; a decline in the number of college-age persons; a substantial increase in the number of those persons between the ages of twenty-five and forty-four, where the great hump of the baby boom appears; some decline in mature adults, then an increase in the 1990s, as the baby boomers grow older; a decline among younger elderly; and some increase in those aged seventy-five and over, the more elderly. A recent divergence in the income distribution indicates that while there were more well-to-do residents in Boston in 1985 than there were in 1980, there were also more poor and near poor. These trends become evident when the declining income of families is compared with the increasing income of unrelated individuals during this five-year period.

Minorities, children, and the elderly are growing components of Boston's population. These groups are also likely to be living in poverty. Minorities are two

and a half times as likely as whites to live in poverty. Children are twice as likely and the elderly one and a half times as likely to live in poverty as are the young and mature adults. Related to this, the two family types that contribute the largest share of families and unrelated individuals in poverty are single-parent families and those who live alone.

There are important implications of these trends for two primary areas of municipal services, education and health care, both of which are responsive to demographic pressures. In Boston, some 15 percent of the population lacks health insurance coverage—26 percent of those in poverty and 11 percent of those above the poverty line. These statistics identify a need for health services that Boston City Hospital has traditionally filled for the poor. The city could continue this tradition by rebuilding the hospital and using it in conjunction with neighborhood health centers. On the other hand, a city with a current excess of hospital beds might seriously consider alternatives to rebuilding.

The profiles of Boston's public school children indicate that a high proportion lack strong economic and familial support systems. Almost half live in poverty; half do not live in a married-couple family. This points to a number of issues for the public schools, including the high costs of needed and mandated programs for special education and bilingual education. In addition, the schools need to assess the extent to which, within the constraints of a limited budget, they can serve the very needy and those who seek a high-quality education.

While health care and education are highlighted here, other areas of municipal services are impacted by changing demographics. Those mentioned include housing, family social services, day care, and the transition to employment from school and home. The needs for these services are changing as the characteristics of Boston's population and economy change. As the fiscal constraints on the City of Boston ease, it's appropriate for the city and those concerned with the welfare of Boston and its residents to reassess the quality and types of city services Boston provides, as well as their cost. The characteristics of the people who live in and may be expected to live in Boston provide a starting point for the discussion of needs, priorities, and effectiveness in the delivery of municipal services. 20

Appendix A
Population Projections for Boston and Massachusetts

Table A1 sets the Boston population projections within the context of three sets of projections for the state. The three sets were prepared by the U.S. Bureau of Economic Analysis (BEA), the MIT-Harvard Joint Center, and the U.S. Census Bureau. The projected populations are very divergent because of differences in the methods, the data, and the outlook on the prospects for Massachusetts. The BEA shows the Massachusetts population growing at 8 percent during the 1980s and at 9 percent during the 1990s. The Joint Center indicates that much more modest growth—namely, some 2 percent—will occur in the 1980s, with population stability following in the next decade. The Census Bureau's projected loss in Massachusetts population between 1980 and the year 2000 is currently undergoing upward revision, as more timely data become available. Boston's population projections, with a growth rate of about 3 percent, fall in the middle of the projected growth rates for the state and appear to be fairly reasonable.

Table A1

**Projected Population of Boston and Massachusetts
(thousands) and Net Intercensal Percent
Change, 1970-2000**

	1970	1980	1990	2000
<hr/> Population <hr/>				
Boston	642	563	579	599
Massachusetts				
BEA		5,737	6,209	6,780
Joint Center		5,737	5,859	5,840
U.S. Census ^a	5,689	5,737	5,704 ^b	5,490 ^b
		1970-1980	1980-1990	1990-2000
<hr/> Percent Change <hr/>				
Boston		- 12.2	2.8	3.4
Massachusetts				
BEA		0.8	8.2	9.2
Joint Center		0.8	2.1	- 0.3
U.S. Census		0.8	- 0.6	- 3.7

Sources:

a. U.S. Bureau of the Census, Current Population Reports, Local Population Estimates, "Provisional Estimates of the Population of Counties July, 1985" shows a population of 5,798,000 for Massachusetts.

b. U.S. Bureau of the Census, Current Population Reports, Population Estimates and Projects, "Provisional Projections of the Population of States by Age and Sex: 1980 to 2000," Series P-25, no. 937.

Appendix B
Population Projections for Boston's Neighborhoods

Table B1 shows population projections for the neighborhoods of Boston. In the foreseeable future, growth will be largely a downtown phenomenon, because this is where much of the housing is either built or is in the planning stage. Most of the growth will occur downtown, especially in the Fort Point Channel area adjacent to South Station. There will be some additional housing around the inner harbor, in Charlestown, and along the waterfront, some further conversions and reclamations in the South End, and some additional housing in Roxbury.

The addition of six thousand persons in the central Boston and Fort Point Channel areas will cause further parking problems in downtown Boston. Two years ago, a report by Cambridge Systematics and Vanasse/Hangen Associates in December 1983⁷ indicated that not only would parking needed for workers increase but, with growing numbers of residents living downtown, it was going to become more and more difficult to find, especially for short-term parkers. The city should increase the number of parking spaces that are required for downtown development.

Table B1

**Population and Growth of Boston
and Its Neighborhoods, 1980-2000**
(in thousands)

Neighborhoods	1980 Population	1980-1990 Growth Rate	1990 Population	1990-2000 Growth Rate	2000 Population
Boston	563	3%	579	3%	599
Inner Harbor	58	7	62	6	66
East Boston ^a	32	2	33	6	35
Charlestown	13	16	15	2	16
No. End-Waterfront	11	14	12	9	13
Downtown	44	17	51	12	57
Central and Fort Point Channel	11	49	16	33	22
Back Bay-Beacon Hill ^b	33	6	35	2	35
Student-Institutional	135	1	137	2	140
Allston-Brighton	65	1	66	2	67
Fenway-Kenmore	31	*	31	2	32
Jamaica Plain	39	3	41	3	42
Southeastern (BCH)	231	2	235	2	241
South End ^c	24	13	28	2	28
South Boston ^d	30	-1	30	1	30
Roxbury	58	5	61	6	64
No. Dorchester	24	-1	24	0	24
So. Dorchester	59	-1	59	1	59
Mattapan	36	-2	35	-2	34
Southwestern	94	-1	93	3	96
Roslindale	33	-3	32	0	32
Hyde Park	30	2	31	5	33
West Roxbury	31	-1	31	2	32

a. Includes Harbor Islands.

b. Includes St. Botolph.

c. Excludes St. Botolph.

d. Excludes Fort Point Channel.

*Less than 0.5 percent.

Source: Boston Redevelopment Authority Research Department, "Population Projections for Boston and for Boston City Hospital Neighborhoods," August 1985.

Notes

1. In this article, the word *children* refers to persons up to fourteen years old; *older teenagers* and *college-age population* refer to persons fifteen to twenty-four; *young adults*, twenty-five to forty-four; *mature adults*, forty-five to sixty-four; *younger elderly*, sixty-five to seventy-four; and *more elderly*, seventy-five and over.
2. The concept of Hispanic origin is defined and used differently in various data sources. In the U.S. Census, it is determined separately from race. Therefore, a person who designates himself to be of Hispanic origin may be of any race; racial categories and Hispanic origin overlap. However, the 1985 Household Survey followed a different convention—namely, the federal categories that are used in determining compliance with minority hiring guidelines. Here, the respondent designates himself to be either white non-Hispanic, black, Asian, native American, specified other race, or Hispanic. If Hispanic is chosen, the respondent may not choose a racial category also; in this case, the racial categories and Hispanic origin are mutually exclusive.
3. In the Household Survey, both families and unrelated individuals are considered to be family units. A family consists of two or more persons living in the same household who are related by blood, marriage, or adoption. An unrelated individual is a person who lives either alone or with unrelated persons.
4. Public assistance income includes payments for general assistance, Aid to Families with Dependent Children (AFDC), and Supplemental Security Income to low-income persons who are "aged (65 years or over), blind, or disabled" (U.S. Bureau of the Census, "1980 Census of Population: General Social and Economic Characteristics," PC 80-1).
5. White non-Hispanic refers to persons of Caucasian race who are *not* of Spanish ancestry, whose country of birth is not Spain, and whose primary language is not Spanish. The category Hispanic includes persons of Spanish ancestry, persons born in a Spanish-speaking country, and persons whose primary language is Spanish.
6. The Private Industry Council (PIC) is a business-led, nonprofit organization that addresses educational and employment issues by working with the Mayor's Office of Jobs and Community Service to allocate federal job training funds. It also works within the public schools to improve the quality of education and job training programs. Boston Works is a joint program of PIC and the Mayor's Office of Jobs and Community Service. It is funded by local businesses, and it promotes adult literacy and job retraining among Boston's unemployed and working poor. The Boston Compact is an agreement between the public schools and the business community. Coordinated by PIC, it gives preference to Boston students in placement or in summer and permanent jobs and gives career counseling to Boston high school students. ACCESS is a scholarship program, endowed by local businesses, that encourages Boston students to enroll in and complete higher education programs by providing both financial advice and financial aid when other funding sources are exhausted.
7. "Parking in Central Boston: Meeting the Access Needs of a Growing Downtown," report prepared for the City of Boston Traffic and Parking Department by Cambridge Systematics and Vanasse/Hangen Associates, December 1983.

The Next Threshold:

Higher Skills and the New England Economy

John C. Hoy

The history of the New England regional economy — its attenuated post-World War II decline and subsequent aggressive renewal — reveals an intensifying relationship between economic resurgence, the supply and continuing demand for professional manpower, and the results of academic research and development. The New England region has “outproduced” the rest of the nation in supplying professionally trained men and women, a leading factor not fully appreciated by those describing the region’s robust economic health in the decade since Neal Peirce wrote The New England States. New England’s “oversupply” in professional fields has given the high-tech and sophisticated services sectors a decided national advantage.

The single most important factor in the enhancement of New England’s future competitive edge nationally and internationally is the maintenance of the current knowledge-based surge of economic growth. This will be accomplished through the continued capacity of New England’s higher education system to oversupply and adjust to the knowledge-intensive employment demands of the future. If the supply of educated manpower and the nationally prominent research and development capacity created by the professionals of the region are to continue, New England cannot rest on current success. Now is the time to use equitable and quality education for all our people to build the foundation for the region’s future prosperity.

New England may be unique among American regions in its common history, its close interrelationships, and physical compactness. But the phenomena it is experiencing today — the “mature” economy, the groping for a “post-industrial” alternative, the worry about accommodating so many millions of people in a fragile life space — may be, if they are not already, the problems of the rest of the United States tomorrow. If New England “fails,” its failure might presage a failure of the whole nation. Thus New England presents a fascinating laboratory and test case in the United States of the metes and bounds of what can be accomplished on a regional basis.

— Neal R. Peirce
The New England States, 1976

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International conflict, military affairs, and world markets have shaped New England. The history of New England's wartime vitality (1939–1945), attenuated postwar decline (1945–1975), and ultimate resurgence (1975–1985) is inextricably linked to the skills of its people and their capacity to grow, adapt, and create. The basis of vigorous postindustrial renewal—generated over the course of four decades through basic and applied research and development—was in large measure the product of the region's academic institutions. The complex story of New England's economic revival is essentially the fact of having the professional and intellectual leadership and the skilled work force required to bring about economic renewal. New England's vitality has taken the form of a knowledge-intensive structure that provides sustained job growth, record employment, expanding capital investment, and, during the past two years, the lowest level of regional unemployment in the nation and its highest level of regional, personal, and per capita income.

Recent economic success pervades regional statehouses, boardrooms, academic senates, and the halls of organized labor as a source both of mounting confidence and intense debate about future priorities. There is a tendency, however, to forget the price extracted by thirty years of pre-1975 decline. The painful transition of the New England economy—from its proud but deteriorating manufacturing base of four decades ago to the knowledge-intensive structure we see today—remains one of the least examined social, economic, and educational facets contributing to the renewal of the oldest industrial section of the nation. No comprehensive economic history of contemporary New England has yet been written bridging the period since the Great Depression. One is needed; and, for our purposes, several major factors are relevant and worthy of recall.

New England's Industrial Past

As the United States entered World War II and New England manufacturing geared up for war production, it was impossible to predict the impact the war would eventually have on the economic landscape of the nation or the region. During the period 1940–1945, New England experienced a reprieve in the relentless deterioration of its historic industrial base. Major new expansions in manufacturing employment throughout New England took place during the war years:¹

- A 154 percent increase in the number of workers producing transportation equipment
- A 137 percent increase in the number of workers producing electrical machinery and equipment
- An expansion of metal working from 28 percent of the region's manufacturing employment in 1939 to 38 percent in 1947
- An increase of 80 percent in other manufacturing employment (principally office machines, textile and other machine tools, mechanical power transmission equipment, and guns of all types)

Despite wartime expansion in new manufacturing technologies, New England in 1947 still maintained a “leading industry” list that reflected the region’s traditional prewar nondurable manufacturing economy. The following New England industries continued to be most prominent:

- Cotton and woolen goods
- Boots and shoes
- Textile production machinery
- Hardware
- Nonferrous metals
- Paper and lumber products
- Printing and publishing

Vermont had granite, marble, and burial caskets; Maine—pulp, paper, and processed lumber; Connecticut—watches; Rhode Island—jewelry, textile dyeing and finishing; New Hampshire—foundry products. The region continued to clothe the nation, put shoes on our feet, provide the paper for (and the contents of) the books we read, make the chairs America sat upon, keep our time, and bury us. It shipped curbstones and gravestones, adorned us, and produced our vacuum-tube radios—all products that the rest of the world no longer viewed as exclusively New England’s manufacturing prerogatives.

Although the development of the new war-related technologies would ultimately have a dramatic long-term impact, the postwar New England manufacturing economy sought to return to peacetime patterns and markets. In 1950 New England continued to produce half of the woolen and worsted goods made in the United States and half of the textile machinery manufactured in the nation.

The New England economy was headed for deep trouble. Regional economists struggled to analyze and propose options for industrial maintenance. Their work, in retrospect, has the feel of good minds defining rearguard holding actions. The underlying reasons for regional decline were not mutually understood by government, business, and higher education.

In his 1952 book, *The Economics of New England: Case Study of an Older Area*, Seymour E. Harris pointedly commented on the lack of engagement in regional issues that was exhibited by New England universities:

Many of her major institutions are national in outlook and hence they do not interest themselves in regional problems of research, management and the like. Institutions of higher learning in other regions, particularly in the South and West, contribute much more to the economic development of their regions.²

The process of decline was relentless. At times, unemployment rates were unbearable. In Lawrence, Massachusetts, 26 percent of the adult work force was unemployed in 1949. In city after city, unemployment approached depression levels. New England began to view itself as a region of the past, a region losing opportunity and promise; and the balance of the nation agreed. During an exceptionally prosperous postwar period throughout the rest of the nation in the late forties and in the fifties, no region experienced higher levels of unemploy-

ment than New England. Beginning in 1949, the final collapse of the New England textile industry was both catastrophic and symbolic.

Recovery — or New Beginning

The New England recovery is a humane story of determined families, corporations, and state governments; a saga unwisely relegated to a part of the regional past many believe is best left to the examination of historians in some future decade.

Since the depth of regionwide unemployment at 11 percent in 1975, shortages in fields requiring highly trained professionals and skilled technical and sophisticated service-industry workers have continued to increase. The current employment picture also reveals shortages of unskilled sales, construction, retail, and production personnel. Unemployment in New England stands below 4.0 percent, and Massachusetts each month continues to boast the lowest unemployment rate among all industrial states in the nation.

Growth in the Service Sector

The regional economy has steadily moved into the service sector—with an emphasis on financial, insurance, health care, consulting, professional, and sales employment—providing sophisticated services to the region as well as the nation and the world. Since 1947, when 370,000 New Englanders were employed in services, the service sector has grown fourfold—to 1.5 million in 1985—the largest single sectoral gain in the nation during that period.

The growing importance of the service sector reflects to a large extent broad trends in the national economy. At the same time, New England is developing a sophisticated “high service” component that is increasingly international in dimension. Generally, as economies mature, there is a shift in the composition of employment toward services. While this is a natural outcome of industrial maturity, the process in the New England region has evolved in its own unique way. The traditionally strong service areas of education, finance, and health care have been strongly supplemented by the service-related needs of high technology, international marketing, and consulting.

Since the mid-1970s, the service sector has grown by nearly 40 percent in the region. New England now employs 24 percent of its labor force in services.

Within the service sector, more than one in three jobs are in a health-related field and more than 15 percent are in education. In 1985 alone, services employment has grown by more than 5 percent in the region, and the jobs created have not all been low paying.

Between 1975 and 1983, over 140,000 jobs were created in the health care industry in the region, as compared to 80,000 in high technology. Moreover, these jobs now create payroll expenditures exceeding \$7 billion. However, the health services sector is fragile and is under extreme cost-containment pressure. Increasing dependency on services in general does not create a foundation for future growth.

Manufacturing and services are inextricably linked. If industrial competitiveness is lost, it will be that much harder to maintain the growth of the service sector, especially since it is apparent that the volume of international service-sector exports, while growing, remains small, even within the banking and insur-

ance industries. In effect, in the long run the loss of manufacturing may result in a loss of the very services that advanced products and processes have the capacity to generate.

High Tech

High tech remains the most visible symbol of New England's economic resurgence. Among all regions of the nation, New England currently has the highest proportion of its total work force in high technology-related jobs. Massachusetts, with over half of all high-tech employment in New England between 1975 and 1980, led the nation in growth of technology industries at 6.6 percent per annum, topping the national rate of 4.2 percent per annum during the same period. During 1982-1984, the rate of growth in Massachusetts slowed to 5.3 percent per annum, still above the national growth rate of 2.9 percent per annum during the period.³

Despite considerable worrisome attention that high-tech employment has received—given the spate of layoffs in 1985-1986 amounting to ten thousand jobs—the long-term prognosis is favorable. College graduates constitute 20 percent of the employment in high-tech industries generally and 33 percent in the computer industry specifically.⁴ New England's concentration of professional and skilled technical workers as a percentage of the total work force is without peer in the United States.

Total New England employment passed the 6 million mark for the first time in 1984. Continued expansion throughout 1985 and 1986 despite high-tech layoffs points conservatively toward 6.5 million employed New Englanders by 1990, perhaps even more.⁵

The comparative advantage enjoyed by the New England states in the employment of technologically skilled workers is revealed in table 1 on the next page. The region in its entirety developed and continues to maintain a distinctive advantage which, in large measure, provided the mobility necessary to sustain the loss of 263,000 nondurable manufacturing jobs (down 31 percent), as 241,000 new durable manufacturing jobs were created (up 34 percent) between 1947 and 1979.

During the same period, 2,085,000 new nonmanufacturing jobs were created. Of these, 561,000 were in wholesale and retail trade (up 94 percent); 500,000 in government (up 148 percent); and 770,000 in other services (up 209 percent).⁶

New Missions for Higher Education

New England, the smallest geographic region in the United States, with one-twentieth of the nation's total population, has more successfully shifted from a traditional manufacturing-based economy to a knowledge-intensive, high-technology, high-service economy than any economic unit in the industrialized world. The shift has been accomplished in large measure because of the flexibility provided by the skills of working people and the eclectic vision of the region's colleges and universities. Institutions of higher education have offered a concentrated pool of highly skilled people and have consistently made scientific and technological breakthroughs in basic research, applied research, and management processes. Their graduates have created and directed the investment of 25 percent of the venture capital available in the United States.⁷

Table 1

**1980 Employment of Technological Workers in
Top Ten States and Other New England States
Percentage of Total Employment**

State	Employed Persons (16 and over nonagric.)	Engineers— %			Technicians and Technologists— %		Precision Production Occupations— %		Technical Workers Total— %
California	10,640,405	213,232	2.0	261,012	2.5	469,828	4.4	8.9	
New York	7,440,768	93,602	1.3	144,310	1.9	304,822	4.1	7.3	
Texas	6,311,845	95,967	1.5	142,950	2.3	280,090	4.4	8.2	
Illinois	5,068,428	68,692	1.4	97,183	1.9	237,746	4.7	8.0	
Pennsylvania	4,961,501	68,046	1.4	98,910	2.0	245,779	5.0	8.3	
Ohio	4,558,442	69,584	1.5	86,133	1.9	241,656	5.3	8.7	
Michigan	3,750,732	68,867	1.7	68,913	1.8	199,908	5.3	8.9	
New Jersey	3,288,302	55,846	1.7	75,223	2.3	143,743	4.4	8.4	
Massachusetts	2,674,275	51,510	1.9	64,850	2.4	126,207	4.7	9.1	
Florida	4,002,330	43,906	1.1	78,799	2.0	129,705	3.2	6.3	
Connecticut	1,482,309	31,838	2.2	34,416	2.3	81,774	5.5	10.0	
New Hampshire	432,622	8,604	2.0	11,026	2.5	24,929	5.8	10.3	
Maine	459,522	4,330	1.1	6,389	1.4	22,647	4.9	7.3	
Rhode Island	426,812	4,795	1.1	7,070	1.7	27,373	6.4	9.2	
Vermont	227,195	3,821	1.7	4,689	2.1	9,748	4.3	7.9	
Totals for New England	5,702,735	104,898		128,440		292,678			

Source: New England Board of Higher Education Analysis of 1980 Census, Bureau of the Census, U.S. Department of Commerce.

New England's public and independent colleges and universities have been notably free to respond to regional employment demands in a highly independent mode of institutional behavior. State and regional manpower planning has been essentially nonexistent. In essence, higher education has controlled the destiny of the skilled labor market in New England through an elaborate patchwork of public and private collegiate and graduate-level programs. State higher-education governing boards have not analyzed in depth the supply/demand issues confronting state economies. New England's most selective and independent institutions neither welcome nor respond directly to the manpower issues of their respective host states. Most would argue that their mission is and should be a step removed from state and regional concerns and prospects. Visitors from other states and international guests frequently comment upon the very modest level of collaborative planning in higher education here.

The most significant state planning initiative in New England is Governor William O'Neill's *Jobs for Connecticut's Future* (JFCF) initiative, released in January 1986. The JFCF report emphasizes the continuing projected decline in traditional manufacturing and the growth of technology-intensive corporations; it also cites manpower shortages in all sectors, including financial services, education, and retailing. In Connecticut, 91.5 percent of all future jobs will be generated by businesses within the state, both existing and yet to be created. Manpower development and corporate human resource strategies will, to an unprecedented degree, focus on the 75 percent of current New England workers who will be employed in 1995, 80 percent of whom do not have college degrees.

"Free Market" in New England

New England has outproduced other regions of the nation in awarding degrees in those professional fields required by a sophisticated service and technology-driven economy. This has been done in the absence of state or regional manpower planning. For the most part, state policies also reveal a limited understanding of higher education's capacity and limitations. To date, higher education in New England has enjoyed a free market philosophy in the conduct of its own affairs and in establishing which academic priorities to pursue.

Ironically, across the nation, state governments are mounting major, well-funded programs which, in part, seek to emulate New England's success. The competitive thrust of these programs is aimed at successfully encouraging the commercialization of research results. Very slowly, ventures elsewhere have begun to influence public policy in New England and to draw the deliberate attention of political leadership here; and none too soon. State government in New England invests less public revenue in research and development than does any other region of the United States.

As New England becomes vulnerable to foreign and domestic competition, it can no longer afford to be smug about low unemployment, arrogant about regional academic prominence, or satisfied with its gifted corporate entrepreneurship. Our institutions of higher education will confront severe challenges in the 1985-1995 decade and will require farsighted state and regional policy if the region is to sustain and expand the skilled human resources and meet the levels of productivity demanded by global participation. The strategic interests of higher education and corporate New England will converge during this decade. The strategy will focus on (1) enhancing support for basic research; (2) creating state incentives for improving the commercialization of research and development through university-industry partnerships; (3) developing a coherent manpower policy to meet the most acute shortages of scientific, engineering, and other highly skilled personnel; (4) upgrading the quality of public school education; and (5) increasing the participation rate of adult men and women, particularly minorities, in a responsive continuing education system. All these issues require more planning, greater collaboration, and a promise of the highest level of corporate support any region in the United States has yet exhibited.

An Overwhelmingly White Economy

The picture is not promising for every ethnic group within New England. New Englanders are overwhelmingly white. The region's share of the nation's black (1.8 percent) and Hispanic (2.0 percent) populations—amounting to 774,000, or 6.2 percent of New Englanders—is the smallest of any section of the country, except for the mountain states of the West. The concentration of black and Hispanic populations residing in New England cities, however, reveals a very different picture. Ninety percent of the region's blacks and Hispanics reside in Connecticut and Massachusetts. The percentage of combined black and Hispanic populations in Boston is 29 percent, and in Hartford, 54 percent.⁸

Wasting Our Minority Youth

Minority student enrollment among New England urban public school districts

varies dramatically. Boston has a 47 percent black enrollment; Lowell, only 2 percent systemwide. Boston's schools are 28 percent white; Lowell's, 79 percent white. While high school dropout rates vary significantly by community, 25 percent of all New England teenagers now leave high school before graduation. Minority youth leave the schools of Boston and Hartford at the rate of 45 to 55 percent. Unemployment of black and Hispanic high school dropouts regionwide is 21 and 15 percent, respectively. In the cities of the region, the rates are significantly higher. By specific locale, the destructive pattern of dropout, unemployment, teenage pregnancy, juvenile crime, malnutrition, and despondency is viciously compacted. Yet it is abundantly clear that the regional economy will need these young people. The inevitable social and economic dependency their condition forebodes requires determined attention along the lines of the Boston corporate community response in establishing the \$5 million ACCESS program endowment to provide scholarships for Boston's predominantly minority student population.

While there are dramatic differences between the conditions confronted by young white urban ethnics in the fifties, sixties, and seventies and those confronted by minority youth in New England cities now, employment demand is decidedly the most significant factor. Jobs and careers exist in abundance today. New England must, as a matter of the highest public priority, invest in the resolution of minority retention in the public schools, access to higher education, job counseling, and student financial aid. Our willingness to do so may be the most accurate measure of whether the states of this region are fully capable of understanding the very purposes of prosperity in a commonwealth.

New England Capacity to Assimilate

It is worth recalling that among all regional populations during the postwar era, New England possessed the highest proportion of émigrés or first-generation Americans. In 1950, almost 50 percent of New England white residents were foreign-born or children of foreign-born (see table 2). By 1960, this proportion was still 40 percent. The education, assimilation, and employment of this extraordinary concentration of new citizens during three decades of economic decline (1945–1975) may reveal more about the human achievement of the region than any other single historic factor shaping the current regional economy.

Educationally and economically, the aspirations of ethnic urban New Englanders sustained the struggling low-wage industries of the region. Recent and incumbent Governors Brennan, Garrahy, Kunin, Dukakis, and Sununu are only a few of the elected leaders whose political vision has been shaped by the process of immigration, education, and assimilation. Their diverse recollections harbor the harsh realities that influenced the achievements of their foreign-born parents or grandparents. Both political parties have been molded by the assimilation process. Yankee ingenuity itself has been informed by the fresh blood of new entrepreneurial coalitions, the educational and scientific attainments of white ethnic groups, and the actions they took to become part of the economic mainstream of a depressed regional economy. New England, particularly the southern tier states, must exhibit the same level of determination to include our minority youth, who cry out for opportunity.

Table 2

**U.S. States with Greatest Relative Concentration of
White Foreign-Born and White Children of
Foreign-Born, 1950 and 1960**

1950			1960		
Rank	State	% of Total White Population	Rank	State	% of Total White Population
1	Rhode Island	49.9	1	New York	41.2
2	Connecticut	49.5	2	Massachusetts	40.5
3	Massachusetts	49.5	3	Connecticut	40.2
4	New York	49.2	4	Rhode Island	40.1
5	New Jersey	44.8	5	New Jersey	37.7
6	North Dakota	39.6	6	North Dakota	30.5
7	New Hampshire	36.1	7	New Hampshire	29.2
8	Minnesota	34.7	8	Illinois	26.9
9	Illinois	33.4	9	Michigan	26.6
10	Michigan	33.3	10	Minnesota	25.8
17	Maine	27.1	15	Maine	23.3
18	Vermont	25.6	18	Vermont	22.0
United States*			United States*		
25.0			20.8		

*United States excluding Alaska and Hawaii.

Source: Robert W. Eisenmenger, *The Dynamics of Growth in New England's Economy, 1870-1964* (Middletown, Conn.: Wesleyan University Press, 1967).

International Interests vs. Internationalization

The key elements in the continuing discussion of New England's strength must include a focus on international and interregional competition for rapid development of quality new products. New England's economic future is intimately tied to the knowledge industry of the region, and the regional economy is one of the most promising in the nation in terms of international markets and investments. Yet the process of internationalization in New England remains characteristically piecemeal and competitively uncoordinated. Traditional campus initiatives abound; their link to new corporate developments in New England is as yet untested. The trade-centered programs of state government agencies in tourism, economic affairs, manufacturing exports, and financial services are unfamiliar to most academic specialists. Consulates of foreign governments in New England find the complex array of independent initiatives bewildering, though each with whom we have had discussions is open to facilitating imaginative working arrangements—thus expressing considerable knowledge of their necessity for New England development.

Within higher education, international substance must become part of both general and professional education. After years of neglect and increasing specialization, the integration of international economic perspective is a necessity. As Sven Groennings, a New England Board of Higher Education senior fellow, has pointed out, leaders in academia and in government—especially state government—need fresh rationales and intellectual connections to economic realities and problems.⁹

It is significant to note that 52.9 percent of all 1984 recipients of engineering doctorates were not American citizens; in 1965, 22 percent were foreign recipients. In 1984, foreign nationals received 39.9 percent of all U.S. Ph.D.s in economics; 38.4 percent in mathematics; 36 percent in computer science; 28.6 percent in business and management; and 27.9 percent in physics and astronomy. Only 4.3 percent of U.S. psychology doctorates were awarded to foreign nationals, though more psychology Ph.D.s were awarded to Americans than in any other field with the exception of education.¹⁰

The regional economy is becoming increasingly integrated with international markets and investments while also becoming knowledge intensive and producing innovative technological goods in circles of severe international competition. New England's sophisticated professional services sector is increasingly international. These are major changes in dimension and in kind, and they are at the cutting edge of regional economic development. Historically, higher education has adapted to and contributed to changes in society, the economy, and technology, and to national needs. At issue now is how the relationship between the internationalization of the economy and the development of higher education's capabilities and functions can be advanced most constructively in an era of international competitiveness. New England should take the lead.

Internationalizing Local Economies

There has been marked decentralization of international economic and educational interests from Washington to the states and campuses of the nation. Cities are understandably the centers of international economic affairs, trade, and international education. The center of economic relationships is not Washington but places such as Atlanta, Baltimore, and San Francisco, as well as Boston, Burlington, Hartford, Portland, and Providence.

The impact of international competitiveness on local economies has captured the imagination of Americans at the same time that they have welcomed the quality and price advantage of imported products. It is no accident that 50 percent of the revenues of American advertising firms and 33 percent of accountant fees are related to international trade.¹¹ While national security issues and the case for citizen education in global affairs remain the major elements in arguing for international education, a general understanding of national defense and cultural matters is insufficient to prepare students and citizens for the frontier of world economic activity that as workers, consumers, investors, and voters they must measure. The international telecommunications revolution will accelerate the need for strategic insight—economic and political. The integration of the international dimension throughout the spectrum of New England life is inevitable. The question is whether we are prepared to address the issue with foresight and imagination.

Higher Education Research and Economic Development

New England's current lead over other sections of the United States in research and development will be under increasing pressure—as well it should be—as the result of state investment in other sections of the nation. Unless we strengthen and build on our delicate competitive edge, the region is in danger of losing the

razor-sharp but thin margin of excellence we appear to take for granted. The concentration of highly skilled workers and professional leadership provides the basis for regional participation in the information-based global economy of the next decade.

Public sentiment nationally and particularly in New England clearly is calling for fulfillment by the 1990s of the promise of a modern multipurpose system of higher education. Continuing education programs, because of their flexibility and adaptability, offer diverse potential for development of targeted job retraining, career change, and skill-enrichment initiatives. But retraining programs must be rigorous. The appropriate questions to be resolved by higher education, government, and business must focus on the quality of retraining offered, for whom, and at what cost, not whether the priority itself is appropriate. Demographic realities and technological competition demand that New England institutions possess a creative response at all levels of higher education, with greater openness to the targeting of collaborative ventures with both industry and government.

The question now is no longer how to reindustrialize the economy but rather how best to sustain and expand the level of human productivity and competence within the new economy. Leaders and planners in business, labor, education, and public policy have a shared responsibility to lead the debate and action on this issue.

Can we afford to rely on the impact of world-class achievements during the past decade without planting contemporary seeds of creativity immediately for future harvest? I think not. We must recognize that vastly increased state tax revenues, generated by five years of intense economic success, must provide the new seed monies required for government to create higher education-private sector partnership programs for future economic development. Seed money is essential for the next growth cycle and must be wisely committed now, particularly in the face of unfocused and contradictory federal policy, which will not be clarified until the 1990s at the earliest. The new role of state investment in human capital and economic development is in its infancy.

The New Role of Higher Education

University faculty in all fields, as well as campus administrators, have an obligation to become intellectually alert to and programatically sensitive toward the human potential of the regional society and the economic factors that will enable New England to respond to the growing dependency of the uneducated and structurally unemployed or unemployable—those they have not served. The region's most nationally prominent institutions are aware of this fact. Clearly, the major issue confronting all postsecondary institutions is how resources in colleges and universities will be reallocated and expanded to address the goal of educational opportunity and the requirements of a new era without disrupting the essential continuity and depth of intellectual development of the past. Institutional responsibility must provide for the continuation of significant intellectual vitality, in its richest sense, which has characterized New England's historic contribution to the nation and world community.

The impact of economic growth or decline is most assuredly a concern academia is beginning to understand. William D. McElroy, former chancellor of the

University of California, San Diego, and past chairman of the National Science Foundation, was deeply distressed with the simplistic rhetoric applied to the military-industrial complex during the days of intense student unrest on campuses fifteen years ago. He later wrote in his essay "The Utility of Science" the following assessment of the issues surrounding the question of economic growth:

I know that in some circles it is regarded as unseemly to speak favorably of economic growth. We are told that we should stop that growth, end our preoccupation with the dollar, cease being fascinated with technological change. We should, instead, get on with the business of redistributing our assets and resources to enhance the quality of life for all our citizens. But it is well to bear in mind that the multitude of goals to be achieved under the rubric "quality of life," from eradicating poverty to cleaning up the environment, can be financed only partially by shifting our present national priorities. Solutions to these problems will be heavily dependent on a healthy annual increment of economic growth. Solutions will also be heavily dependent on the marshalling of new knowledge through fundamental research and the achievement of new technologies."¹²

As New England's industrial base faltered and its economy struggled from 1945 to 1975, a modest degree of academic engagement was revealed by the higher education community. The worsening economic situation of the region became a threat to the social structure of which the academy was a prominent, though aloof, partner. In such fields as optics, abrasives, precision instruments, and defense-related industries (arms manufacture has vigorously dominated sectors of New England manufacturing since the American Revolution, as it appears it will again in the 1990s), academic and business connections did operate to mutual benefit. But such was not the case with New England agriculture, fisheries, furniture, energy resources, and traditional manufacturing, generally. The decline of these sectors may in part reflect a pattern of neglect or indifference fostered by a tradition of intellectual noblesse oblige shared by New England scholars and scientists. Absent were the necessary ingredients (of research and development) required to rebuild industries through innovation and the applied assessment of knowledge to regional economic issues early enough to be of use. During the 1945–1975 period, the public universities of the region had neither the engineering faculty nor research and development resources to contribute. Indeed, more scholarly attention and research has been accorded these sectors of the economy since their demise than during their attenuated period of decline. The price paid for the underfunding of public higher education led to the attendant loss of human energy and personal aspiration of young people who, had they lived in other regions, would have successfully pursued postsecondary education.

The physical decline of hundreds of New England towns and the major cities of the region as a result of the limited commitment to human capital renewal is still in evidence. We must seek to avoid contemporary repetition of this tragic pattern. Public higher education should have the resources and prerogative to be engaged in analyzing, shaping, and responding to the economic growth of the region and to present compelling public policy analysis to government and industry concerning the options available for investment of state and corporate wealth on behalf of society.

Research: The Critical Factor

Quality higher education is the crucial factor in the knowledge-intensive New England economy. We need greater understanding of how competencies are taught and learned and how well colleges and universities are assessing what students know. Schools are the central capital investment and infrastructure of a knowledge society, as Peter Drucker has pointed out: human capital, "defined as the skill, dexterity, and knowledge of the population, has become the critical input that determines the rate of growth of the economy and well-being of the population."¹³

A national yardstick of the importance of New England academic institutions and nonprofit research institutes is the region's capacity to compete for research and development grants and contracts awarded by the federal government. Analysis of 1982 National Science Foundation data published in 1984 profiles considerable evidence of the region's competitive position.¹⁴

New England institutions (academic, nonprofit, and corporate) are highly competitive with all other regions of the United States in award of federal obligations. Support to the region is the most concentrated in the nation. With only 5.3 percent of the total U.S. population, New England receives 11 percent of the total federal obligations for research and development to industrial firms and 12 percent of the total federal obligations for research and development to colleges and universities. In selected categories, New England receives 12 percent of NASA and 13 percent of Department of Transportation research and development expenditures, together with 15 percent of the total obligations of the National Science Foundation.

In biomedical areas, 15.5 percent of National Institutes of Health (NIH) research grants are awarded to the region's colleges and universities, institutes, and nonprofit hospitals, as are 19 percent of NIH fellowships and training grants. The National Institutes of Health awards 38 percent of research and development obligations to non-university-owned, but university-affiliated, voluntary hospitals in New England.

Of all the contracts and grants the Department of Defense (DOD) awards to university and nonprofit research institutes in the United States, 40 percent go to New England institutions. DOD contracts and grants for 1985 are presented in table 3, on page 104. The nation significantly depends upon New England's nonprofit defense-related research network. The \$1 billion of New England DOD academically related research budget should be compared with the \$1.5 billion in total expenditures of the six New England states provided in 1987 for the support of the public and independent colleges and universities, including all state student financial aid.

Do New Englanders understand the significance of the local research and development enterprises they fund through their federal tax dollars? A public opinion poll cosponsored by the New England Board of Higher Education and the Council for the Advancement and Support of Education (CASE), conducted in 1984 by the Opinion Research Corporation, offers a clue. The poll found the following significant differences when comparing New England and national attitudes on whether federal support for higher education and medical research should be increased, stay at its present level, or be decreased:¹⁵

	"Increase."		"Stay as is."		"Decrease."		"No opinion."	
	N.E.	U.S.	N.E.	U.S.	N.E.	U.S.	N.E.	U.S.
Government aid for higher education	73%	61%	20%	28%	6%	10%	2%	1%
Government funding for medical research	82%	73%	17%	21%	1%	5%	0%	1%
Government financial aid for college students	71%	53%	21%	35%	6%	11%	2%	2%

Table 3

Department of Defense (DOD) Research and Development Contracts to Colleges/Universities and Nonprofit Organizations in New England, FY 1985

New England Colleges and Universities	Amount Awarded	Type of Institution
1. Massachusetts Institute of Technology	\$ 360,104,000	Private
2. University of Massachusetts	6,141,000	Public
3. Yale University	5,507,000	Private
4. Harvard University	4,637,000	Private
5. Trustees of Boston University	3,691,000	Private
6. Brown University	3,530,000	Private
7. University of Rhode Island	3,413,000	Public
8. Wentworth Institute of Technology	3,199,000	Private
9. Northeastern University	2,476,000	Private
10. Emmanuel College	2,436,000	Private
11. University of Connecticut Foundation	1,346,000	Public
12. Dartmouth College	1,152,000	Private
13. Trustees of Boston College	1,048,000	Private
14. University of Lowell	650,000	Public
Subtotal, New England Private	\$ 387,780,000	97.1%
Subtotal, New England Public	\$ 11,550,000	2.9%
Total, New England Public and Private	\$ 399,330,000	
New England Nonprofit Research Institutes		
1. Charles S. Draper Laboratory	\$ 305,238,000	
2. Mitre Corporation	260,995,000	
3. Woods Hole Oceanographic Institution	11,548,000	
Total, Nonprofit Research Institutes	\$ 577,781,000	
Total, Colleges/Universities, Nonprofit Research Institutes	\$ 977,111,000	
	U.S. Population	Proportion of DOD Nonprofit Grants
New England	5.3%	40.06%
Balance of U.S.	94.7%	59.94%

Source: New England Board of Higher Education Analysis of U.S. Department of Defense data as published in the *Chronicle of Higher Education*, 26 June 1986 (institutions receiving \$500,000 or more).

New England public opinion has consistently supported federal increased expenditures for higher education and academic research in all categories. New Englanders, however, are less supportive of defense expenditures than the rest of the American public.

A Unique New England Capacity: Producing Professionals

With 5.3 percent of the total U.S. population in 1982, New England produced the following proportions of advanced degrees:¹⁶

- 7.3% of medical residents (specialists)
- 8.0% of Ph.D.s in all fields
- 8.3% of Ph.D.s in all scientific disciplines
- 8.6% of law school graduates
- 9.3% of MBAs
- 10.0% of Ph.D.s in humanities
- 10.1% of Ph.D.s in engineering
- 11.0% of Ph.D.s in physical sciences

In specific disciplines within the sciences, such as computer science, electrical engineering, mathematics, physics, and astronomy, New England production of Ph.D.s is twice the national rate. The advantage such output represents to the region is reflected in the location new Ph.D. recipients choose for employment.

The Pragmatic Region

Of all recipients of Ph.D.s awarded in the nation in 1984, the percentage of those in selected disciplines who are employed in New England include the following:¹⁷

Political Science/International Affairs	5.0%
Business and Management	6.2%
Engineering	6.3%
Economics	7.8%
Mathematics	8.6%
Physics/Astronomy	8.3%
History	9.4%
Computer Science	10.7%
Biochemistry	11.9%
Foreign Language	13.7%

In the absence of quality comparative data on corporate demand, the degree of “overproduction” by New England institutions during the past two decades has provided the most significant human resource “insurance policy” available in the technologically advanced regions of the nation and perhaps the world.¹⁸

Massachusetts ranked third among the nation’s top ten states enrolling seven thousand or more graduate students in science and engineering. The rates of growth in matriculated graduate students during the period 1976–1983 are presented in table 4, on page 106.

The pursuit of undergraduate degrees in business and management is remarkably high in New England, exceeding national output by an estimated 50 percent

Table 4

Rates of Growth in Number of Matriculated Graduate Students, Science and Engineering, in Top Ten States, 1976-1983

Number of Graduate Students		State	Average Annual % Change, 1976-1983	Rank on Growth
1976	1983			
35,807	40,058	California	1.6%	10
31,159	40,203	New York	3.7%	5
17,380	23,170	Texas	4.2%	3
15,031	20,067	Massachusetts	4.2%	3
14,633	16,802	Ohio	2.0%	8
13,923	17,598	Pennsylvania	3.4%	6
13,744	16,786	Illinois	2.9%	7
7,397	11,319	Florida	6.3%	1
7,284	8,207	Indiana	1.7%	9
7,186	9,619	New Jersey	4.3%	2

Source: New England Board of Higher Education Analysis of *Surveys of Science Resources Series*, National Science Foundation (Washington, D.C., 1985).

Table 5

Percentage of Students Enrolled in Business and Management Programs (1976, 1978, 1980) in New England and U.S., and Degrees Awarded (1982)
(numbers in %)

State	1976	1978	1980	1982*
Connecticut	11.1	17.4	20.3	22.1
Maine	13.7	14.6	15.7	13.6
Massachusetts	16.2	16.5	15.7	19.0
New Hampshire	21.4	24.7	26.5	23.8
Rhode Island	17.6	19.8	19.8	24.0
Vermont	9.0	10.5	11.6	11.2
United States	11.7	13.2	13.7	NA

NA signifies that information is not available.

*Percentage of bachelor's degrees awarded.

Sources: New England Board of Higher Education Analysis of National Center for Educational Statistics (NCES) data, 1976, 1978, 1980; and 1982 unpublished NCES regional data.

(see table 5). New England institutions of higher education and their students are far less liberal-arts oriented than their image projects. The highly visible concentration of nationally selective independent colleges and universities undoubtedly explains the image, but not the reality, of liberal learning in New England.

A Distinguished Level of Production

The baccalaureate sources of male and female doctorate recipients in the United States reveal that the most productive New England campuses continue to be the region's independent colleges and universities, including those listed here.¹⁹

Universities	Colleges
1. Boston University	1. Amherst
2. Brandeis	2. Bennington
3. Brown	3. Bowdoin
4. Dartmouth	4. Hampshire
5. Harvard	5. New England Conservatory
6. M.I.T.	6. Smith
7. Wesleyan	7. Wellesley
8. Yale	8. Williams

The leading public university in the region is the University of Massachusetts at Amherst, which ranked twenty-third among all U.S. colleges and universities in output of baccalaureates who received Ph.D.s in 1984. M.I.T. ranked fourth, Harvard ninth, and Yale twentieth among the top thirty nationally.²⁰

Another way to compare the relative concentration of scientific and engineering talent (see table 6) in a given state is to use the ratio of academically employed scientists and engineers to state population (see table 7 on page 108). Massachusetts ranks an undisputed first in the nation by this measure. With a ratio of 3.5 scientists and engineers per 1,000 population, the colleges and universities of the Commonwealth possess by national standards an exceptional pool of talent for teaching and research.

Table 6

Engineering Degrees in New England and the U.S.
(1971, 1978, 1979, 1980, 1982)

Degree	1971	1978	1979	1980	1982
Bachelor's					
N.E.	3,419	3,719	4,309	4,619	5,296
U.S.	43,167	46,091	52,598	58,117	66,990
% (N.E. to U.S.)	7.9%	8.1%	8.2%	7.9%	7.9%
Master's					
N.E.	1,414	1,421	1,316	1,541	1,627
U.S.	15,899	15,736	15,624	16,927	18,289
% (N.E. to U.S.)	8.9%	9.0%	8.4%	9.1%	8.9%
Professional Engineering					
N.E.	113	110	62	77	69
U.S.	494	446	412	302	254
% (N.E. to U.S.)	22.9%	24.7%	16.5%	25.5%	27.2%
Doctor's					
N.E.	335	264	232	244	293
U.S.	3,640	2,573	2,815	2,753	2,887
% (N.E. to U.S.)	9.2%	10.3%	8.2%	2.9%	10.1%
All Degrees					
N.E.	5,281	5,514	5,925	6,481	7,285
U.S.	63,190	64,846	71,449	18,099	88,420
% (N.E. to U.S.)	8.4%	8.5%	8.3%	8.3%	8.2%

Source: New England Board of Higher Education Analysis of *Surveys of Science Resources Series*, National Science Foundation (Washington, D.C., 1985).

Table 7

Science and Engineering (S&E) Ph.D. Employment
at Universities and Colleges, Top Ten States, 1980

State	Ph.D. S&E Empl.	State S&E Empl. Rank	State Pop. 1980	State Pop. as % of U.S. Pop.	State Pop. Rank	Ratio State S&E Empl./1000 State Pop.	Rank State S&E Empl./ State Pop.
California	39,658	1	23,668,000	10.4	1	1.68	5
New York	35,297	2	17,558,000	7.8	2	1.49	7
Illinois	21,208	3	11,427,000	5.0	5	1.86	4
Massachusetts	19,789	4	5,737,000	2.5	11	3.45	1
Pennsylvania	16,086	5	11,864,000	5.2	4	1.36	8
Michigan	14,678	6	9,262,000	4.1	8	1.58	6
Texas	13,545	7	14,229,000	6.3	3	0.95	10
Ohio	12,449	8	10,798,000	4.8	6	1.15	9
Indiana	11,600	9	5,490,000	2.4	12	2.11	2
Wisconsin	9,615	10	4,706,000	2.1	16	2.04	3

Source: New England Board of Higher Education Analysis of *Ph.D. Scientists and Engineers Employed at Universities and Colleges*, National Science Foundation (Washington, D.C., 1982).

Table 8

Income from Wages and Proprietorships,
New England States, 1981-1985

(in billions of dollars)

State	Nat'l Rank	Billions of Actual Dollars		Billions of Real Dollars (1982)		Real Growth	Annual Growth Rate
		1981:1*	1985:4\$	1981:1	1985:4	1981:1-1985:4	
New Hampshire	1	\$ 6.1	\$10.2	\$ 6.7	\$ 9.0	34.2%	6.4%
Massachusetts	4	45.3	70.1	49.6	62.0	25.1%	4.8%
Connecticut	9	27.4	40.8	29.9	36.1	20.5%	4.0%
Vermont	10	3.2	4.7	3.5	4.1	19.3%	3.8%
Maine	15	6.6	9.6	7.2	8.5	16.8%	3.3%
Rhode Island	19	\$ 6.4	\$ 9.1	\$ 7.0	\$ 8.1	15.0%	3.0%

*First quarter 1981.

\$Fourth quarter 1985.

Source: New England Board of Higher Education Analysis of *The Bi-Coastal Economy*, a report of the Joint Economic Committee of the U.S. Congress, 14 July 1986.

Leading the Bicoastal Economy

The Bi-Coastal Economy, a report by the Democratic Staff of the Joint Economic Committee of the U.S. Congress, reveals that growth in the gross national product (GNP) since 1980 has averaged 2.3 percent. While comparative data in gross state product are surprisingly not tabulated, the Joint Economic Committee has gathered state-based information on income from wages and proprietorships. The national ranking of the New England states is presented in table 8.

Rise in personal income and continued job growth led the committee to suggest the following:

If this trend of a regional disparity in family income growth were to continue, by the middle of the next decade, there would be a more than 40% difference between the average income of families living in the coastal group of states and families living in the rest of the country. That would roughly equal the regional disparity which existed between northern and southern states during the first half of this century.²¹

The report reveals that California, alone in the West, and fifteen East Coast states—sixteen states in all, containing 70 percent of the U.S. population—generated 70 percent of real growth in wage and proprietorship income between the first quarter of 1981 and the last quarter of 1985, and 90 percent more job growth per capita than the rest of the nation. My own analysis reveals that among all the bicoastal states, the New England region, with 5.3 percent of U.S. population, experienced the highest rate of real income growth (1982 base), producing \$23.9 billion of the \$234 billion national total, or 10.1 percent.

As Edward Moscovitch pointed out in the *Wall Street Journal*: “Without a doubt,” the leading element in “the Massachusetts Miracle” is the “\$1.5 billion of federally sponsored research performed each year by its scientists and engineers.” He recommended that “state governments should find ways of providing seed money to help promising university and industry researchers compete for federal grants, and promoting applied research in fields related to their economic base,” and added that contrary to conventional wisdom, the “boom clearly traces back to the late 70’s before [Proposition] 2½ was enacted.” He believes the Commonwealth’s attractiveness to thinkers and entrepreneurs “lies deeper than its tax structure.”²²

New England State Investment in Higher Education: Gaining on the National Average

As New England has continued to lead the nation in gain in per capita income during the period 1983–1986, the level of state tax revenues available for public investment has increased proportionately.

Despite consistent improvement in state funding for higher education, New England per capita and per \$1,000 of personal income investment remains below the national average. The proportion of New England total state revenues committed to higher education also remains below the national average. Given the robust regional economy and the exceptional dependence of the economy on teaching, research, and academic public service, continued improvement in public investment is necessary. The New England states provided 4.3 percent of all U.S. state expenditures for higher education in 1986, up from 3.8 percent in 1982 (see tables 9, 10, and 11 on pages 110 and 111).

The Need for a Science and Engineering Policy for the Region

Regional strength in applying scientific talent to new products and services is vital to the future prosperity of New England. It is essential for us, at minimum, to develop a broad and coherent science and engineering policy to guide and assess priorities for the future.²³

Table 9

**State Tax Funds for Higher Education Operating
Expenses, Per Capita Appropriations, New England
and U.S., FY 1982-1987**
(in dollars)

State	1982	1983	1984	1985	1986	1987
Connecticut	\$ 72.73	\$ 80.09	\$ 86.78	\$ 96.04	\$104.60	\$116.87
Maine	57.87	63.32	66.52	78.89	87.28	108.30
Massachusetts	72.08	81.58	98.59	110.61	122.65	140.81
New Hampshire	40.23	36.03	42.01	43.60	51.48	57.32
Rhode Island	86.90	94.70	101.46	108.43	114.76	121.26
Vermont	63.96	71.13	75.28	78.87	83.02	88.30
New England	69.25	76.55	85.14	97.38	107.07	121.98
United States	\$ 97.20	\$102.53	\$109.35	\$118.59	\$130.12	NA

NA signifies that information is not available.

Sources: New England Board of Higher Education analysis (August 1986) of data from state higher education offices; *Statistical Abstract of the United States, 1986, 106th ed.*; M. M. Chambers and Edward R. Hines, *Appropriations: State Tax Funds for Operating Expenses of Higher Education, 1981-1982 through 1986-1987*, National Association of State Universities and Land Grant Colleges, Washington, D.C.

Table 10

**Appropriations of State Tax Funds for
Higher Education Operating Expenses in
New England, FY 1987**

State	Appropriation (in thousands)	2-Year Gain (as a percentage)	10-Year Gain (as a percentage)	Per Capita Appropriation (in thousands of dollars)	Per \$1,000 Pers. Income
Connecticut	\$ 368,648	22%	153%	\$116.9	\$ 8.3
Maine	125,216	37%	194%	108.3	11.5
Massachusetts	816,379	27%	240%	140.8	11.4
New Hampshire	55,961	31%	145%	57.3	5.0
Rhode Island	117,149	12%	108%	121.8	10.9
Vermont	46,778	12%	132%	88.3	9.5
New England	\$1,530,131	25%	190%	\$121.7	\$10.0

Sources: New England Board of Higher Education analysis (September 1986) of data from state higher education offices; *Statistical Abstract of the United States, 1986, 106th ed.*; M. M. Chambers and Edward R. Hines, *Appropriations: State Tax Funds for Operating Expenses of Higher Education, 1981-1982 through 1986-1987*, National Association of State Universities and Land Grant Colleges, Washington, D.C. Disposable personal income by state, figures for 1984, from the Department of Commerce Bureau of Economic Analysis, reported in K. Halstead, *State Profiles: Financing Public Higher Education, 1985-86*.

Because high technology and traditional industries will continue to be affected by the adverse consequences of foreign competition, a serious attempt must be made to unite state government, universities, and corporations in assuring the increased level of funding required to improve facilities and equipment, raise the standard of teaching, and encourage talented young people to enter science and engineering programs.

Three elements of a science and technology policy are essential:

Table 11

**Appropriations for State Tax Funds for Higher
Education in New England and U.S., FY 1982-1987**

(in millions of dollars)

State	1982	1983	1984	1985	1986	1987
Connecticut	\$ 229.4	\$ 256.6	\$ 273.7	\$ 302.9	\$ 329.9	\$ 368.6
Maine	66.9	73.2	76.9	91.2	100.9	125.2
Massachusetts	417.9	473.0	541.6	641.8	711.1	816.4
New Hampshire	39.3	35.2	41.1	42.6	50.3	56.0
Rhode Island	83.6	91.1	97.6	104.5	110.4	117.1
Vermont	33.9	37.7	39.9	41.8	44.1	46.8
New England	871.0	962.8	1,070.8	1,224.8	1,346.6	1,530.1
United States	\$22,954.5	\$24,212.9	\$25,824.0	\$28,006.5	\$30,730.0	NA

NOTE: The New England Board of Higher Education predicts that Massachusetts will rank first among all states on ten-year rate of gain in FY 1987. While this is impressive, the Commonwealth ranked fiftieth in proportion of public revenues invested in higher education a decade ago, and will, following ten years of effort, only reach the national average in FY 1987. The capacity to do so is clearly related to sustained improvement in the state's economy from 1975 to 1985.

NA signifies that information is not available.

Source: New England Board of Higher Education analysis (September 1986) of data from M. M. Chambers and Edward R. Hines, *Appropriations: State Tax Funds for Operating Expenses of Higher Education, 1981-1982 through 1986-1987*, National Association of State Universities and Land Grant Colleges, Washington, D.C.

1. The ability of the region to expand funding for basic research and applied research sciences
2. The creation of legitimate programs that will enhance the process of commercialization while maintaining the integrity of academic inquiry
3. The continued development of highly trained personnel to meet the basic, applied, and entrepreneurial requirements of the regional economy

Over the last decade, colleges and universities in the region have demonstrated the quality of their programs by continually competing effectively for their share of federal research and development grants. In 1976, New England attracted an 11.1 percent share; in 1983, a 12.2 percent share, as compared again to a base of 5.3 percent of national population. Indications are that the New England share will have been maintained when the National Science Foundation reports 1985 data in 1987. We must ensure that we are continually at the frontiers of new knowledge. It is in basic research that the region will continue to find the seeds of renewal and the new products and processes necessary to be competitive in the international arena.

The Example of Biotechnology

Biotechnology is one example of a direct link between our successes in securing federal research grants and developing new products commercially. The strong links between the biomedical and biotechnical industries and universities have encouraged the emergence of more than 130 biotechnology corporations in the

region, almost all of which are continuously linked to academic laboratories.

Biotechnology is entering a fragile stage in its development. Much of the past development of the industry has focused on research efforts to develop recombinant DNA, cell fusion, and bioprocessing techniques. After twelve years of research following the first successful insertion of foreign DNA in a host organism in 1973, the biotechnology industry is bringing products to market. Potential industrial applications include production of pharmaceuticals, animal and plant agriculture, specialty chemicals and food additions, environmental applications, commodity chemicals, and bioelectronic instruments, including biosensors and new conducting devices called biochips. The drive now is to move scientific ideas into the marketplace safely.

Universities in New England play a major international role in the development of biotechnology products worldwide by carrying out research independently or in cooperation with industry. The success of biotechnology commercial development in the region will critically depend on translating scientific processes from the universities into safe, competitively priced, well-marketed products. Undoubtedly, the acceleration of this process requires an increasing emphasis on (1) promoting commercial-academic research; (2) encouraging the development of entrepreneurs in the universities; (3) developing university-business liaison functions to protect intellectual property rights and secure adequate funding for product development; (4) arranging viable university-industry partnerships; (5) investing more of a university's endowment fund in the commercialization of potentially successful research ideas; (6) securing equity involvement for academic participants in any products developed; and (7) utilizing the region's capability of securing federal funding for research ideas to upgrade and maintain laboratories in state-of-the-art fashion. Extensive partnerships in research development among universities will prove to have a vital role in generating commercial potential and ultimately employment from research ideas.²⁴

The dramatic increase in the development of partnerships between universities and emerging biomedical industries reveals the accelerating pace of technological changes as well as the new mode of collaboration. Biomedical collaboration is a generation ahead of the more collegial high-tech university patterns of a decade ago.

Both universities and industries are testing the mutual benefits emerging from new patterns in research-licensing agreements that permit industry access to new science and encourage privileged development of products in advance of competitors. Corporate access to personnel with outstanding credentials at relatively low cost will allow leading universities to develop additional intellectual resources through collaborative arrangements as corporations continue the investment cycle. The pattern is intimate and risks limiting the dissemination of significant discoveries.

The Study of Productivity

The U.S. work force remains the most productive in the world; the New England work force is the most productive in the nation. However, Japanese and western European productivity is improving faster than our own. Research into how higher education affects human productivity in the work force is comparatively

scarce. Yet it will be surprising if this decade does not see a measurable increase in significant research on the interdependence of education, productivity, and quality of product. The inquiry itself will invite new levels of collaboration between higher education and business. Certainly as the nation's economy grows in knowledge intensity, such investigation should help to shape the nature of collaborative settings. Reassessment of the measures of productivity will be an essential ingredient, as will the evaluation of enabling and humane working conditions necessary in enterprises requiring more of educated workers than has been the case in the past. Corporations have already revealed a level of intellectual curiosity about themselves in this respect and will, with encouragement from the academy, participate in well-conceived studies and experimental modes of employment—with employee support and interest. Several dimensions of the productivity issue require renewed attention and each should be developed in New England:

- Quality of the New England product—production of goods and services that are technically superior and improved by advanced processes of production, product reliability, and enhanced service
- Quantity of the product—improvement through technological innovation and motivation of skilled workers to match or excel productivity standards nationally or internationally
- Regional emphasis on the production of goods and services that are more highly valued by consumers than those which can be produced with less education and skill
- Regional recognition of excellence in design, variety, and choice of products through state-of-the-art industrial processes
- Pursuit of state policies that provide enabling conditions and incentives that encourage full employment: training, child care, flexible scheduling, and innovative compensation and benefit programs
- Regional pride in and capacity to change, develop, and respond to new ideas, research applications, and humane modes of encouraging innovation
- Emphasis on encouraging high-morale work settings that provide individual challenge, and personal respect as a hallmark of New England management-labor relations

These factors are evident in corporate settings throughout the international marketplace. Educated labor is the critical element. For New England, appreciation of the unique role of skilled labor should be a regional advantage.

Business must clearly define for colleges and universities their needs for educated personnel—not on an urgent quarterly basis, but two to four years in advance of demand. Strategic planners in business must assess and communicate to higher education what skills are required, particularly in the high technology and sophisticated services sectors. Higher education cannot be expected to provide capable manpower without understanding the changing requirements of the business world. Planners must have an in-depth knowledge of the forces impinging on their companies from within and without, including social and historical

factors. Corporations must recognize that rapid economic change will require workers to attain new skills continually and adapt to new conditions throughout their working lives. Academia has the obligation to provide a competent and flexible work force, knowledgeable and courageous enough to shape and alter corporate structures and capable of addressing the necessity for continuing and self-education.

Human Resources and Manpower Policy

Given the sustained low regional unemployment rate, professional manpower policies have particular significance for the region.

Communication among corporations, institutions of higher education, and professional associations with regard to manpower issues remains far more limited than we imagined. The candor and the channels of discourse within most professional fields remain confined to subsets and specialities among the professions.

The absence of clearing centers jointly sponsored by government, higher education, and business and industrial associations has quite naturally led to the extraordinary expansion of executive search and relocation services as for-profit organizations. Such services are expensive and focus primarily on corporate demand rather than on the career plans of individuals. Further, executive search organizations are highly competitive and whatever knowledge they possess does not enter the public realm.

The state and federal system of occupational classification is out of date. Long-term federal and state preoccupation with the legitimate concerns of unemployment has led to a lack of attention to the rate of change in technical-sector occupations. Leadership occupations that have the greatest impact on total employment growth and change within corporations are not understood by state and federal agencies.

New England possesses unusual strength in advanced professional education. Yet we know little about the extent of this resource, its full scope, sufficiency, and economic impact, and how best to measure, harness, and channel this growing asset toward the careers and public- and private-sector institutions that offer the greatest promise of serving the interest of regional economic and social development.

Insight into Employment Demand Essential

A regional clearinghouse would help. It would centralize and coordinate the information and forecasting that are now available, and it would serve as a resource to assist in developing supply and demand data for business, higher education, and government in the states. Given the limits and lags of data collection, organization, and dissemination, such a clearinghouse would hardly address perfectly our varied information needs, but it would certainly advance the level of information and opportunities available.

Public understanding of corporate manpower planning remains limited at best. For example, among our most sophisticated high-tech industries, the layoffs which were heralded by the press and which involved professional and technical personnel amounting to cadres of two hundred, five hundred, or fifteen hundred

individuals revealed to the external community corporate incapacity to assess market conditions and adjust demand through an orderly process. Sudden and large-scale layoffs lead to lack of confidence in subsequent demand for new professional and technical staff when conditions improve. While fluctuations in demand appear inevitable, there remains the question of whether corporate leadership is as capable as it should be of handling the ups and downs of its personnel requirements. A process capable of managing personnel supply and demand would be less costly than shakeouts and would have the added financial benefit of instilling employee loyalty and long-term confidence in corporate prospects.

State Coordination

During the past decade, the New England states have engaged in a plethora of major and minor reorganizational efforts aimed at creating improved state-level coordination of higher-education initiatives. During an eight-year period, twenty-four different individuals have served as state chancellors or interim chancellors of higher education in the six states. In the Commonwealth of Massachusetts, eight incumbents have served as chancellor or acting chancellor since 1978. The absence of stability in the principal public higher-education executive position explains to a considerable degree the general absence of planning and the current level of political involvement in decision making. Longevity of tenure among governors and legislative leaders as well as college and university presidents is greater.

However, the most stable leadership group in the region exists among corporate executives, particularly in the new technology industries founded in New England. Disdain for politics and distress with the slow rate of academic change has kept the most creative corporate executives away from the time-consuming process of bringing about changes in public policy and reform in education. Nonetheless, one measure of the deep significance corporate New England attaches to education-related public policy issues is the increasing coverage education receives in the business pages of New England's major dailies and business journals. The politics of higher education may appear to be rougher of late than the politics of law, medicine, and the "politics of politics itself," but increased willingness on the part of committed business leaders to become involved as trustees, advocates, and commentators is overdue. It is telling that no corporate leader has, as yet, commented substantively in print or in public on the priorities the business community would urge the new chancellor of higher education in the Commonwealth of Massachusetts to consider.

The Impact of Demographic Change

The anticipated decline in college enrollments, projected to be most severe throughout New England between 1988 and 1992, will be extremely difficult for the least selective campuses. The decline will create a level of intense competition that may also threaten the survival of quality among all but the most highly selective colleges and universities in the region. Is business concerned? Is it involved? Are our state legislatures prepared to assess the potential impact of campus closings during the great shakedown of 1988-1992? For example, the most difficult period will occur during the academic years 1988-1989, 1989-1990,

and 1990–1991 in Massachusetts. Of the projected fifteen-year decline in high school graduates between 1979 and 1994, 44 percent is expected to occur during this three-year time frame.²⁵ The gap between campus capacity and entering freshman enrollments will be repeated four years later as graduate and professional schools face enrollment declines. Perhaps most significant for the economy will be the manpower shortages confronting corporate, government, and non-profit employers between 1992 and 1996, when college graduates throughout the region will be in short supply. Advertising revenues will be dramatically inflated through the Help Wanted pages of the *Boston Globe*, the *Hartford Courant*, the *Providence Journal*, the *Concord Monitor*, the *Burlington Free Press*, and the *Portland Press Herald*. But the graduates will not be available to respond.

What the enrollment projections now reveal is that traditional employment markets will change, wages will rise, and economic expansion will be limited by the supply of educated men and women. Most institutions of higher education, having recognized the need to capture new clientele, have systematically engaged in sophisticated and costly marketing, recruiting, and retention efforts. Also effective have been offerings for adults—flexible, varied, and job-related curricula as well as off-campus classes, evening and weekend offerings, and job-site instruction. These shifts have expanded the regional network, providing educational services to an older New England population whose constituents are concerned about their preparedness to participate fully in the region's "new" economy. The current high demand for skilled employees has persuaded many individuals to delay improving their prospects. Campuses have responded with highly distinctive yet totally independent strategies. The point is that higher education has responded to an enrollment market that is more dynamic than any since the GI Bill opened up the American system of higher education.

Is There a Pending Crisis?

The sharp increase in demand for new technical skills has produced a series of severe problems for colleges and universities. Technology-related classes are badly overcrowded, faculty underprepared or in short supply, equipment obsolete, and instruction generally lagging behind "state of the art" realities—all of which suggests a rapid deterioration in the learning process for many students. There is a growing shortage of qualified technical instructors, as more generous salaries plus better equipment and facilities for research lure faculty away from academia into the private sector. A glut of undertrained engineers in dated disciplines is a distinct possibility by the end of the present decade, a possibility reminiscent of the boom-and-bust cycle of 1959 to 1975.²⁶ New England higher education, government, and industry must now take immediate steps to address the most pressing areas of qualitative decline and must establish strategies to resolve intermediate and longer-term issues. Government leaders have a greater than ever stake in providing incentives for higher education and business to move toward sorting out and solving projected manpower shortfalls. No area of state policy requires greater attention.

Admission of part-time students into professional and doctoral programs is receiving increased attention as a way to educate older qualified people. Part-time students already comprise a sizable graduate enrollment in Ph.D.-granting institutions, but they are not necessarily enrolled in the doctoral program at

M.I.T., Harvard, or Yale. Boston University, the Hartford Graduate Center, Northeastern, the University of Rhode Island, the University of Massachusetts, and the University of Connecticut are presently lacking sufficient resources to undertake the assignment.

Business leaders have already begun to look to nontraditional sources for college-educated and professionally trained employees. As the New England economy gains national stature, and with unemployment remaining at historic lows, it is possible to predict joint corporate programs aimed at encouraging in-migration of well-educated, professional people, attracted to New England's expanding economic environment and its unique culture and lifestyle. The "cultural amenity" factor is particularly attractive to professionals in the work force, those who are motivated not only by good job prospects but by the obvious attractions of "a premier place to live, study and work."²⁷ New England is currently successful in retaining its college graduates. With respect to people who were attending college in 1975, 72 percent continued to reside in the same state and 16 percent were living within the Northeast in 1980. The region should continue to improve upon retention of graduates above the age of twenty-five, seeking in sensible ways to halt the historic net out-migration of all age groups in New England.

Professional manpower is critical to the future economic development of the region. In terms of managerial and professional occupations, there is net in-migration with the exception of Massachusetts and Rhode Island. In the period 1975-1980, in-migration accounted for a relatively small part of changes in the labor force, and prospects are not very encouraging that this situation will change in the future, particularly with housing prices rising faster than the significant improvement in personal income.

Maintaining a Margin of Excellence

In order to allow individuals and corporations to exploit new growth opportunities, the problem-solving skills of professionals in all fields in the future will have to be increasingly adaptable. Given the reality of labor shortages, by 1995 there could be a rapid increase in wage levels, which might undermine our ability to compete. If the region is to remain competitive, institutions of higher education must adjust their curricula to allow for the internal mobility of personnel, worker changes in location or function within an organization, and the eventuality that a person may switch from mathematics to computer science or from computer science to electrical engineering or from high-tech management to patent law in the course of a professional career.

While it is very likely that employers will be scrambling to attract and retain the available science and engineering talent, I am particularly concerned about regional commitment to maintain and expand research and development capacity unless a higher proportion of prospective students select science and/or engineering as a course of study and increased corporate and state resources are made available to support these programs.

As W. Lee Hansen suggested this past February in his report to the Science Policy Task Force of the U.S. House Committee on Science and Technology, it seems likely that the shortage of new entrants may induce existing personnel to switch jobs and/or occupations, delay retirement, or become retrained.²⁸ The critical issue is whether we will provide incentive for enough scientists and engineers

to remain in higher education to offer education and training for future generations. We will not be able to provide the education and training needed to meet the challenge of international competition unless a high priority is placed on upgrading public school, collegiate, and university teaching.

As stated in *A Threat to Excellence*: "It is impossible to maintain superiority at the college and university level without competent education at the primary and secondary levels. Moreover, students going on to post-secondary vocational education programs must 'relearn the basics,' diverting resources that could be used more productively for technical training. For students seeking jobs directly after high school, the public school system must constitute the future backbone of the region's skilled and technical work force. . . . It is clear to Commission members that the existing public school system is not fulfilling its goals."

A further comment in *A Threat to Excellence* demonstrates the need for action: "What are the processes by which new thinking gets into the system? Many of our faculty are on the fringes of what were yesterday's scientific advances. . . . If officials in higher education attempt to adjust curricula based on an outside view of what we (industry) are doing, their changes are going to be outdated very quickly. Once they catch us in a time frame, we will already be doing something else. We must tell universities and community colleges what our manpower requirements will be."²⁹

Over 25 percent of the New England high school population fails to graduate, destined to expand a growing disenfranchised and dependent segment of our society. Given the dramatic demographic changes that are likely to occur in the next six years, solving the high school dropout problem is an urgent priority. As a region, we must act decisively to correct the level of waste of human talent that we have tolerated for several decades.

The latest Department of Labor surveys reveal that the five fastest growing occupations are data processing mechanics, office machine services, computer operators, computer programmers, and computer analysts. All of these placements could be filled by individuals with solid high school education, supplemented with community college degrees.³⁰ Improving the quality of our educational system at each level is essential if we are to address emerging entry-level requirements in growth fields.

Reaching a Consensus

Implicit in all of these comments is a clear consensus in favor of an ongoing and focused dialogue among business, education, and government to maintain regional educational quality. Public policy and business policy have mutually supportive roles to play in helping colleges and universities respond flexibly to changing industry manpower needs. Moreover, if our competitive educational advantage over other regions is no longer assured (or no longer as secure as it has been in the past), the region will, of necessity, move from dialogue among key participants in the region's economy to collaborative action.

It is increasingly imperative that the region focus on the quality of high school education for the declining number of students between the ages of fourteen and eighteen. Our future economic success is critically tied to higher levels of academic achievement among non-college-bound students, not just among those who will pursue postsecondary education.

Conclusion

Skilled human capital is the rockbed of New England's economic strength, the vital resource in establishing the future capability of the region to compete nationally and internationally. Education is critical to increasing productivity and improving the quality of New England products and their acceptance worldwide. The region cannot rest on current success. Now is the time to use education to build the foundation for future regional prosperity.

Science and engineering, the availability of skilled labor, a decided edge in professional leadership, and a unique concentration of venture capital have provided the basis for New England prosperity since 1975. We must recognize the growing importance of basic research to our economic competitiveness. Before it is too late, New England must increase the quality of education and training at all levels throughout the region. Business must respond with imagination and long-term commitment to education to assure the quality training of young scientists, engineers, and educated manpower generally. We must act together to develop a comprehensive growth policy for New England aimed at developing a particularly flexible regional labor force skilled to meet the pace of economic change.

As international competition intensifies, the emerging threshold of New England's economy will require that knowledge be qualitatively applied more rapidly to the solution of technical, economic, and social problems than at any point in our history. In learning how to do so, we must strengthen the entire educational system.

There is no time for bickering—political, academic, bureaucratic, or corporate. Strong, farsighted leadership is required and bold collaborative steps must be extended to correct the tragic pattern of human waste the region has permitted to prevail in the conduct of its public schools. While partnerships in behalf of genuine reform are emerging throughout the region, the patterns of action have been studiously slow.

A major premise of this discussion returns to the question of whether or not New England is prepared to invest in the creative priorities that have generated economic growth in the first place. A corollary question is whether or not the policy lesson is fully understood. The connection between quality basic education, research and development, and skilled job creation is axiomatic. The possession of an unequaled concentration of skilled people, rich and flexible modes of venture capital, and an expanding role in national and world affairs will quicken the pace of innovation throughout New England. The centrality of knowledge to continued regional prosperity is indisputable. Do we have the vision to address the unresolved issues hindering the provision of educational equity and quality for all our people? Will greater numbers be left behind without skills? As the answers to these questions become clear in the next decade, we will be in an all too prominent position to judge how well New England has invested her renewed prosperity. 🐼

Notes

1. Robert W. Eisenmenger, *The Dynamics of Growth in New England's Economy, 1870-1964* (Middletown, Conn.: Wesleyan University Press, 1967). Eisenmenger's book remains a remarkable treatise on regional economic development.
2. Seymour E. Harris, *The Economics of New England: Case Study of an Older Area* (Cambridge, Mass.: Harvard University Press, 1952). The Harris study is a benchmark work on the analysis of economic change.
3. "The Economic Outlook for Massachusetts," Bank of Boston, Economics Department Report, September 1985.
4. Melvin H. Bernstein, "Fine-tuning New England's Labor Force," in New England Board of Higher Education publication, *New England's Vital Resource: The Labor Force* (Washington, D.C.: American Council on Education, 1982), 3.
5. New England Board of Higher Education Analysis based on data from the 1980 U.S. Census and the Departments of Employment Security of the six New England states.
6. Peter Doeringer, Patricia Flynn Pannell, and Pankaj Tandon, "Market Influences on Higher Education: A Perspective for the 1980s," in New England Board of Higher Education publication, *Business and Academia: Partners in New England's Economic Renewal* (Hanover, N.H.: University Press of New England, 1981).
7. This information was presented by Frank Morris, president of the Federal Reserve Bank of Boston, in a speech before the Council of Northeast Governors (CONEG), Rye Brook, New York, 29 July 1986.
8. Richard G. King, "Minority Students in New England Higher Education," *Connection: New England's Journal of Higher Education* (New England Board of Higher Education, Fall 1986).
9. Conversation with Sven Groennings, senior fellow, New England Board of Higher Education, August 1986.
10. *Summary Report, 1984: Doctorate Recipients from United States Universities*, National Research Council (Washington, D.C.: National Academy Press, 1986).
11. Internal memorandum by Melvin H. Bernstein, senior fellow at the New England Board of Higher Education. The memorandum was prepared for the Commission on Legal Education and Legal Practice and the Economy of New England, New England Board of Higher Education, September 1986.
12. William D. McElroy, "The Utility of Science," *Science and the Evolution of Public Policy* (New York: Rockefeller University Press, 1973), 27.
13. Peter Drucker, *Wall Street Journal*, 3 March 1981.
14. New England Board of Higher Education Analysis of *Surveys of Science Resources Series*, National Science Foundation (Washington, D.C., 1985).
15. *National Attitudes Toward Higher Education*, Opinion Research Corporation, New York City, November 1984.
16. *Summary Report, 1984: Doctorate Recipients from United States Universities*, National Research Council (Washington, D.C.: National Academy Press, 1986); and information provided by the American Bar Association (ABA); the Law School Admissions Council (LSAC); the Association of Academic Health Centers (AAHC); and the National Center for Education Statistics (NCES).
17. *Summary Report, 1984*.
18. For a more complete discussion of manpower issues, see John C. Hoy, "The Professional Manpower New England Has Been Provided May Be the Answer to What the Region Needs," *The Alden Seminars, A White Paper, Massachusetts Higher Education in the Eighties: Higher Educa-*

tion and Engineering Workplace Needs (Boston: Association of Independent Colleges and Universities of Massachusetts and the University of Massachusetts, 1986).

19. *Summary Report, 1984.*
20. Ibid.
21. "The Bi-Coastal Economy: Regional Patterns of Economic Growth During the Reagan Administration," a study by the Democratic Staff of the Joint Economic Committee of the Congress of the United States, 9 July 1986; revised 14 July 1986.
22. Edward Moscovitch, "The Massachusetts Miracle," *Wall Street Journal*, 8 July 1986.
23. See David Warsh's article in the *Boston Globe*, 20 May 1986, entitled "Support Builds for National Science Policy."
24. Neville S. Lee, "Biotechnology: A New Phase of Development in New England," a report prepared for the Bank of Boston, October 1985.
25. "High School Graduates, Projections for the Fifty States" (Boulder, Colo.: Western Interstate Commission for Higher Education, 1979; revised 1985).
26. "Engineering and Technological Education in New England," *Issues in Planning and Policy Making* (New England Board of Higher Education, October 1981).
27. *A Threat to Excellence: The Preliminary Report of the Commission on Higher Education and the Economy of New England* (New England Board of Higher Education, March 1982), 26. *A Threat to Excellence* was the first among more than two hundred state and national reports released since 1982 on the deterioration of American education.
28. W. Lee Hansen, "The Impact of Demographic Trends on the Scientific and Engineering Workforce," testimony before the Science Policy Task Force, Committee on Science and Technology, U.S. House of Representatives, 27 February 1986.
29. *A Threat to Excellence.*
30. James M. Howell, "The Audacity to Be Creative," keynote address delivered at Rivier College in Nashua, New Hampshire, on 3 October 1983.

Imagining Boston: The City as Image and Experience

Shaun O'Connell

I think there are two ways in which place is known and cherished, two ways which may be complementary but which are just as likely to be antipathetic. One is lived, illiterate and unconscious, the other is learned, literate and conscious. In the literary sensibility, both are likely to co-exist in a conscious and unconscious tension: this tension and the poetry it produces are what I want to discuss.

—Seamus Heaney, "The Sense of Place," in
Preoccupations: Selected Prose 1968–1978

I want to discuss community and imagery, social division and literary unity, Boston poetry and prose. In most issues of *NEJPP* I will focus upon those recent books that fire our imaginations and help us shape our sense of local and regional place. In this issue, however, I want to look back at the tradition of imagery that resonates in Boston's history. Old ideas of Boston are quickly being buried under layers of architectural and cultural renewal. While the suburbs become more urbanized and the commuter roads more clogged, downtown Boston is in the midst of the greatest building boom since after the fire of 1872. The graceful, Florentine Custom House, once Boston's tallest building, will soon be overshadowed by the massive International Place complex, just as the Bulfinch State House has long been crowded by glass boxes along Boston's skyline. The new Boston seems aggressive, glitzy, pricey, a consumer's fortress, like the vast mall-and-hotel complex called Copley Place. Still, other less looming images of Boston persist, as Henry James discovered after he found his home on Ashburton Place razed, and as Robert Lowell discovered amid the rubble of the excavations for the garage under the Boston Common. Boston's real treasures, finally, are not its buildings but the images of permanence created in James's *American Scene*, Lowell's "For the Union Dead," and many other works. In this issue of *NEJPP* it would be timely to look back at that informing body of imagery. Only by knowing who we have been can we possibly understand who we are and how each of us is linked to ideas of place, this place: Boston.

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The City upon a Hill has been Boston's central, recurrent image, positing an elevated, spiritual, fixed *place*. Other images amplify, modify. The Athens of America designation is an effort to convert this spiritual vision into cultural terms. Hub of the Universe is a hyperbolic trope that suggests new American commercial and social energies which, in fact, often let Boston dangle like a fifth wheel. Above all, it is the City upon a Hill image which, however much Boston expanded and divided against itself, reminded us of who we thought we might be and still stands as an emblem of what we yet might become. This image—at once literary, political, and spiritual—stands as Boston's great achievement. As the city has grown larger and more various, it has had more to battle over; at the same time, our sense of ourselves as one people, as Bostonians, has been steadily renewed by our writers, those who read the topography, traced the genealogies, and kept the commemorative albums of Boston's tense family history.

I have never lived in Boston. Instead, I have either approached it with the eagerness of a provincial or have entered Boston proper, center city, with the wariness of a suburbanite without a resident sticker. I approach Boston from the west: from Route 2, where, from a hill in Belmont, the city shimmers with promise; or from the Massachusetts Turnpike, which, after the toll booth in Allston, provides you with a quick glance at the Charles River, then carries you by the Back Bay business complex; often you then find yourself stalled on the clotted Central Artery, at which point you have time to brood, in proper Puritan fashion, upon the metaphysical and moral implications of all you have seen.

I realize my visitor's view is selective; I have composed my own Boston out of the array of its offerings. First of these, for me, was the Braves Field of Tommy Holmes's era, then the Fenway Park of Ted Williams's reign, then the Boston Garden of Bill Russell's province. The movie palaces along Washington Street. Later, Scollay Square, Columbus Avenue jazz spots, and North End restaurants; later yet, Beacon Hill dinner parties and Swan Boat rides for my children, who came to Boston with their own images of anticipation, shaped by McCloskey's *Make Way for the Ducklings* and White's *Trumpet of the Swan*.¹ So too would I come to Boston, like the birds in these stories, drawn by its sounds, sights, and other felicities. I speak not from my experience of daily life in Boston, but, rather, of Boston life as I have composed it in my selective experience and embellished it in my imagination.

The life that I can speak to with blood knowledge occurred thirty miles west of Boston, in Marlborough, Massachusetts, where I grew up—another country of fact and feeling. Marlborough was static and small then: its population had expanded only from 13,609 in 1900 to 15,787 in 1950. It was homogeneous, self-contained in its provinciality. Until my friends and I left for Korea or college, few of us went anywhere. (Thus Boston was our Paris or our Bangkok when we cut high school classes and went into town, timorous would-be sailors on a spree.) In Marlborough, my friends and I sat on the high school wall, watching cars cruise up and down Main Street, turning at the World War I monument; we shot pool at Bibbie's or we leaned against another wall in front of the Colonial, a spa across the street, scheming our escapes. My Marlborough was a place of muffled ethnic and class tensions. My Marlborough was the place that housed

John Brown's bell, stolen from Harper's Ferry during the Civil War. My Marlborough was the place where, when you came of age, you went to work in the shoe shops or you got out. It was Sherwood Anderson's Winesburg, John Updike's Olinger, or James Joyce's Dublin: the place you wanted to leave behind when you sought a world elsewhere. Surely this might seem weak preparation for a meditation on Boston.

Perhaps not. In *Province of Reason*, Sam Bass Warner, Jr., gives Boston a broader geographic reach than I could have imagined when I lived in Marlborough. "Today the Boston metropolis, with more than six million people, stretches outward approximately eighty-odd miles from the old parent city."² Further, Warner caught my attention with a chapter on Marlborough titled "Failure of Community." He focuses upon the successful efforts by shoe manufacturers to break the shoeworkers' union in 1898–1899, an effort that resulted in the loss of jobs for two thousand workers and the reduction of the city's population by one-third. Warner uses Marlborough—a city that has more than doubled in size since 1950, thriving on high tech and its central location—as a model community of "experiences whose meaning has been lost."³ For half a century the mills and factories set themselves against their workers, then moved out, and no one did anything about it. "There was public suffering, but no public power or responsibility."⁴

As I read Warner's version of Marlborough, I remembered the social tensions from my boyhood days, particularly between the Italian and Irish communities. They were a perpetuation of the animosities that surrounded the strike of 1898–1899, when, according to *The WPA Guide to Massachusetts*, Italian strikebreakers replaced Irish laborers.⁵ Tensions flared between the Big House families—the shop owners and their circle, who lived in big houses up the hill on Pleasant Street—and the rest of us, whose parents were shaped by memories of the depression. No wonder some of us could not wait to get out. Our Marlborough was a microcosm: a polity united on one level against common enemies, particularly during World War II, but divided along caste and class lines, a condition made worse by enforced proximity and limited opportunities. Seen that way, Marlborough may have been an instructive social laboratory in which to learn certain principles applicable to Boston.

Boston's history is characterized by even more pervasive social divisions, but Boston offers in compensation an ideal vision of itself which, unlike Marlborough, renews its sense of communal, political, and literary life. Boston has a sense of itself, reflected in its imagery. The *myth* of Boston redeems the city. Only Route 495 and its high-tech industries could revive Marlborough.

I could see my Marlborough writ large in *Common Ground*, J. Anthony Lukas's study of Boston during the so-called busing crisis of the mid-1970s, for Lukas's Boston was also divided along territorial, racial, ethnic, and class lines, its citizens, sensing encroachment, struggling over limited turf and reduced economic opportunities.⁶ In my Marlborough of the forties and fifties these tensions were muffled by patriotism and conformity; in Lukas's Boston of the 1970s, these tensions explode, but, as his title indicates, he sought the outlines of a myth of community beneath the fractured surface of Boston's recent history.

Lukas's Bostonians are honorable men and women, not the hot racists and cold reformers of popular conception. By alternating point of view and entering

the stream of consciousness of his major characters, Lukas creates a work of art in which we gradually suspend judgment and come to see divided Boston from several persuasive perspectives. Yet we never see these families stand together, because his material, the recent history of Boston, will not yield the evidence his myth demands. In the eyes of some, *Common Ground* provides an inadequate representation of the Boston community. Thomas I. Atkins, counsel for black plaintiffs in Boston's school desegregation case, calls *Common Ground* a "tragedy" that omits portrayals of black leaders "whose roles . . . dwarf" those of the white leaders who are portrayed.⁷ Lukas's book, juxtaposing selected racial, class, and ethnic representations, provides the brief illusion of common ground for a still divided city. His wish for common ground in Boston translates into *Common Ground*, a territory of imagination on which divided citizens can stand together, though they might stand separately in the Boston of fact.

Lukas portrays division but construes a salvific myth. He does this, in part, by making Boston's history a common ground, aligning the hatreds and ideals of current Boston with those of its original settlers. When he writes of Irish Americans who moved into Charlestown, he invokes John Winthrop's image of an earthly New Jerusalem, when *his* settlement arrived in Charlestown in 1630. Winthrop envisioned Boston as "the city upon a hill," an image that inspired and haunted succeeding generations, says Lukas. As Charlestown became a settlement of Irish-American workers, it shaped a notion of community into Townie ethnocentricity. For Lukas, the Charlestown Irish acted in a Boston cultural tradition.

Just as the Puritans had once sought to build an exclusive fellowship of saints on that peninsula, so now the inheritors of that myth sought refuge in an ethnic haven sealed off from the hostile world.⁸

"Great hatred, little room," said Yeats of Ireland,⁹ a formulation that tells us, as well, something about Boston. Boston too is united, like Ireland, more in myth than in fact. Imagery allows Boston a sense of single *place* in compensation for its history of divided enclaves. Metaphors of landscape and weather suggest common grounds and atmospheres that unite Bostonians who live in suspicion of other groups from other ends of the city.

Animosity and constriction were far from the hopes articulated by John Winthrop in "A Model of Christian Charity," a sermon delivered in 1630 aboard the *Arbella* before settlers arrived in the bay of what they called New England. It is a document that defines the particular combination of idealism and anxiety which characterizes later conceptions of Boston. Winthrop spoke to the possibilities of love and community.

We must delight in each other, make others' conditions our own, rejoice together, mourn together, labor and suffer together: always having before our eyes our commission and community in the work, our community as members of the same body. . . . For we must consider that we shall be like a city upon a hill, the eyes of all people are upon us.¹⁰

Here Winthrop imagines Boston, its landscape and its community character, *before* he sets foot on it. To adapt a line from Robert Frost, the land was his before he was the land's. It existed as pure, exalted *idea*, derived from these dissenters' will to believe in its possibility.

England's colonials,
Possessing what we still were possessed by,
Possessed by what we now no more possessed.¹¹

For Winthrop, Boston must have been a promised land with infinite prospect, what Frost called "the Gift Outright." He was, like F. Scott Fitzgerald's Dutch sailors in *The Great Gatsby*, "face to face for the last time in history with something commensurate to his capacity for wonder."¹² His city upon a hill would stand as a model of Christian community to those sinners in England from whom the Massachusetts Bay Colony was, all but in name, separating.

Boston would be a city of several hills, particularly what was called Trimountain, which encompassed Pemberton (later Cotton Hill), Beacon and Mount Vernon. For 150 years, as Walter Muir Whitehill reminds us, the colonists settled on the level ground of their narrow peninsula with one narrow neck to the mainland, on their tight little island,¹³ but the hill, later leveled and unified into the squat and pricey Beacon Hill we know, was their image of affirmation and ascent. Sentry Hill, the high central peak of Trimountain, got its name from the 1634-1635 order of the General Court that "there shalbe forthwith a beacon sett on the sentry hill att Boston, to give notice to the country of any danger."¹⁴ Within fifteen years of the Bay colonists' arrival, then, the hill, the Puritan Acropolis, became Boston's mighty fortress.

There has long been much to guard against. At Ma-re Mount, or Merrymount, on Mount Wollaston, for example, Thomas Morton, in the words of Samuel Eliot Morison, "gathered a knot of boon companions" to live in defiance of Puritan prohibitions, in what Morton himself called "Faire Canaans second self."¹⁵ Early in the twentieth century, Cardinal William O'Connell claimed several high grounds in the territorial battle that has long characterized Boston's ethnic-religious history. As Lukas notes, Cardinal O'Connell set Boston College on Chestnut Hill and a monastery, a convent, a hospital, and a chancery, modeled after a Renaissance palazzo, on Nevin's Hill in Brighton. "Around and about the whole city," said the satisfied O'Connell, "God has set up his fortresses of sacrifice and prayer."¹⁶ Morton's commune and Cardinal O'Connell's Catholic outpost: just what Winthrop must have feared when he told his colonists they must enter into a covenant, a solemn promise of sacrifice to his ideal city upon a hill, or "the Lord will surely break out in wrath against us."¹⁷ Yet Morton and O'Connell built out of their own biblical models of community. From the first, Boston was a beacon, a fort, an evolving image that housed its divided citizens' aspirations and anxieties.

In *Walden* Thoreau said "Some must work in fields if only for the sake of tropes and expressions, to serve a parable maker one day."¹⁸ He harvested metaphors from his bean field. So has the narrow, infertile, stormy land of Boston long provided a fair field for those inclined, like Frost's Oven Bird, to make much of a diminished thing.¹⁹ Experience modifies ideal visions, as Winthrop soon discovered. Settlers had to defend themselves against encroachment by boozers, Quakers, Papists, and other malcontents who sought to impose their visions upon the narrow landscape of Boston.

The weather also threatened. As early as 1630, John White wrote a tract, *A Planter's Plea*, which defended Boston against the charge that it was uninhabitable. "The cold of winter is tolerable," he insisted. There are serpents, but they

do not bite. As for the mosquitoes:

After one year's acquaintance, men make light account of them; some slight defense for hand and face, smoke, and a close house may keep them off.

White's Boston is a place where citizens must turn inward, keep close houses, to protect themselves. In any case, "rich soil" leads to degeneration among its citizens, while "a country such as this" encourages "piety and godliness, . . . sobriety, justice and love."²⁰

In the imagination of many settlers, Boston represented both a cold pastoral and a fiery field, a *moral landscape*. Boston's weather was not only, as Twain noted, changeable, it embodied chastening extremes that tested its citizens' characters. Boston meant winter and Quincy meant summer to Henry Adams in his *Education*.

With such standards, the Bostonian could not but develop a double nature. Life was a double thing. . . . Winter and summer, town and country, law and liberty, were hostile, and the man who pretended they were not, was in his eyes a schoolmaster—that is, a man employed to tell lies to little boys. Though Quincy was but two hours' walk from Beacon Hill, it belonged in a different world.²¹

Juxtaposition has long been a favorite Boston mode, a way to stress the unity of diverse elements. Diversities of landscape and weather united a people whose nature was double.

Its atmospheric extremes are stressed in much of the literature set in Boston. A frozen wasteland suits the passionate possessiveness of Olive Chancellor in Henry James's *Bostonians*, where "the long, low bridge . . . crawled, on its staggering posts, across the Charles" in "the general hard, cold void."²² The same iron-cold, relentless atmosphere appears in William Dean Howells's *Rise of Silas Lapham* as the narrative approaches the moment of Silas's fall, when the winter snow was "beaten down, and beaten black and hard into a solid bed like iron."²³ At the other extreme, in Edith Wharton's *Age of Innocence* a man in search of his illicit love comes to Boston only to find the steamy city a site of decadent commentary on his quest. "The streets near the station were full of the smell of beer and coffee and decaying fruit, and a shirt-sleeved populace moved through them with the intimate abandon of boarders going down the passage to the bathroom."²⁴ Only a steamboat ride away from the city can restore serenity to the lovers. The narrator of Nathaniel Hawthorne's *Blithedale Romance* sets out for a version of Brook Farm in West Roxbury in the midst of an April snowstorm, weather that mocks the fires of reform.²⁵ In Henry James's *Europeans* an expatriate returns home to face another fierce spring storm. From the Parker House she looks down upon Boston:

The windowpanes were battered by the sleet; the head-stones in the grave-yard beneath seemed to be holding themselves askance to keep it out of their faces. A tall iron railing protected them from the street, and on the other side of the railing an assemblage of Bostonians were trampling about in the liquid snow. Many of them were looking up and down; they appeared to be waiting for something.²⁶

Of course, Boston weather is not always bad, and is not, even at its worst,

always so construed by observers. In *Sleepless Nights*, her autobiographical novel, Elizabeth Hardwick recalls a storm in 1954, when she and her husband, Robert Lowell, lived in Boston:

Here I am in Boston, on Marlborough Street, number 239. I am looking out on a snow-storm. It fell like a great armistice, bringing all simple struggles to an end. In the extraordinary snow, people are walking about in wonderful costumes—old coats with fur collars, woolen caps, scarves, boots, leather hiking shoes that shine like copper. Under the yellow glow of the streetlights you begin to imagine what it was like forty years ago. The stillness, the open whiteness—nostalgia and romance in the clean, quiet, white air.²⁷

Even at its best, in Hardwick's imagination, Boston muffles passion and struggle under snow and heavy clothing. Its *past* resonates in her mind, not its present. In 1959 Hardwick would write "Boston: The Lost Ideal" to explain her sense of contemporary Boston: "wrinkled, spindly-legged, depleted of nearly all her spiritual and cutaneous oils, provincial, self-esteeming," its days of glory "over at last."²⁸ For her the claim that Boston constituted the Athens of America amounted to false advertising: "There has never been anything quite like Boston as a creation of the American imagination."²⁹

Boston is, as we see, a creation and re-creation of many compensatory myths to which successive writers add embellishments. Certainly Boston—however muffled, chill, humid, or diminished—becomes an occasion for rhetorical release. In fact, the city has been an amazing catalytic converter of complaint into vivid imagery. There is, perhaps, something in its air which takes delight, even in the midst of denunciation, in harvesting tropes and expressions to serve parable makers. We may trace it back to the Puritan impulse to chart an unseen world from the contours of the seen: to keep vivid in their collective imagination the city upon a hill while they were aboard ship or living for a century and a half upon moist lowlands. Or we might trace such writing to what I might call the Dublin theory of creativity: Given such weather, what else could people do but stay indoors and write? In *The Bostonians* and *The Europeans*, James's visitors have to leave Boston for Cape Cod or the suburbs to relax into fine weather. Howells's Silas Lapham is driven out to pastoral Vermont. Hardwick can appreciate only a Boston of "open whiteness," a still rural Boston.

For distinguished residents of Concord in the nineteenth century, Boston's only redemptive element was its proximity to nature. Hawthorne, in 1840, wrote in his *Notebooks*:

I went round and across the Common and stood on the highest point of it, whence I could see miles and miles into the country. Blessed be God for this green tract, and the view which it affords.³⁰

The Boston Common, "this green tract," reminded Hawthorne of a pastoral frontier. Arcadia was elsewhere, glimpsed in the midst of the encroaching city. The image of the City upon the Hill had been reduced to a watchtower from which one could see "miles and miles into the country." In Hawthorne's mind, Concord had replaced Boston as the new city upon a hill. In an analogous symbolic transformation, Walden Pond became "earth's eye" to Thoreau.³¹ Puritan polity here yields to pastoral self-development. For these writers,

Concord stood in relation to Boston just as Boston had stood in relation to London; the old city was repudiated for the new land, God's country, where you could begin life anew. The American imagination moved inexorably, in an image of Wright Morris, to the "territory ahead,"³² which was always a re-creation of a lost ideal land of one's imagination. As Adams's Quincy was enlightening near Beacon Hill, Concord's proximity to Boston—for Thoreau, Walden's proximity to Concord, his lesser Boston—was useful for quick comparisons, moral juxtapositions.

Consider, as he recalls it in his 1836 essay, "Nature," Ralph Waldo Emerson crossing the Boston Common. He felt a "perfect exhilaration," but the day was overcast; one could find "perpetual youth," he decided, only in the woods.³³ The Common provided him with an epiphany of transcendence to his Shangri-la. "Build therefore your own world," he urged, rather than accept the imprisonments of Boston's institutional and architectural structures.³⁴

Emerson's *Journals* are filled with delightful denunciations of Boston. In 1841 he summed up Boston life as trivial theater:

Life in Boston: A play in two acts, Youth & Age. Toys, dancing school, *Sets*, parties, picture galleries, sleighrides, Nahant, Saratoga Springs, lectures, concerts, *sets* through them all, solicitude & poetry, friendship, ennui, desolation, decline, meanness, plausibility, old age, death.³⁵

For all that, Emerson was drawn to Boston, perhaps because it provided him with the necessary, gritty counterpoint to his exalting imagination; Boston was the touchstone to his transcendence, while Concord constituted what Irving Howe has recently called "the American newness."³⁶ Emerson's Boston smelled, literally, of the past, as Howells's Back Bay would later smell of urban renewal. Getting and spending had laid waste to Boston's ancient moral powers for Emerson, particularly when it supported Webster's 1850 speech in favor of the Fugitive Slave Act. Then it was a disgrace, said Emerson, to be a Bostonian.

Yet Emerson, a founding member of the Saturday Club after all, conveyed an ambivalence about Boston which Thoreau dismissed. In a letter, Thoreau wrote:

The only room in Boston which I visit with alacrity is the gentlemen's room at the Fitchburg depot, where I wait for the cars, sometimes for two hours, to get out of town. It is a paradise [compared] to the Parker House.³⁷

Thoreau, like Emerson, was raised in Boston; Concord was his imagined alternative. As a boy he came out to Concord to visit his grandmother; then he first saw pure Walden Pond, "one of the most ancient scenes stamped on the tablets of my memory."³⁸ The "territory ahead" is his flight past the nets. "Flight," said Wright Morris, about Thoreau and other Concordians, "not from what they had found, but from what they had created—the very culture of cities they had labored to establish."³⁹

Boston's poor, nineteenth-century immigrants, of course, saw Boston culture differently. Boston was not only not Europe, it also embodied social principles and economic opportunities which, they imagined, would protect the stranger in this strange land from styles of exploitation to which he had become accustomed. Oscar Handlin cited newcomer John O'Donovan in *Boston's Immigrants*:

I am sick . . . of Ireland and the Irish and care very little what may happen; for whatever may take place things cannot be worse. . . . [I] move into the deserts of the western world there to learn a RUDE but STURDY civilization that knows not slavery or hunger.⁴⁰

The confrontation between these cultures—the immigrant Celts, Italians, Jews, and others against the resident Yankees and each other—is, as you all well know, and as Lukas has recently documented, the drama that converted Boston from a homogeneous to a divided community—a tale of two or more cultures, though each opposing side thought little of the other sides' "culture." The Irish immigrant responded to Boston Brahmin hostility with strategies of accommodation, followed by aggressive Philistinism, particularly in the voice of James Michael Curley, who liked to say that "it took the Irish to make Massachusetts a fit place to live in."⁴¹

Though it would be hard to imagine from Curley's rhetoric, there has also been a strong history of cooperation between the newcomers and the resident establishment, trace elements of a synthesis formed from the cultural dialectic, images of cohesion. The early Irish-American mayors of Boston, for example, Hugh O'Brien and Patrick Collins, worked effectively with the Yankee government. In the persons of John Boyle O'Reilly, poet and editor of the *Pilot*, and John Bernard Fitzpatrick, third bishop of Boston, the Irish-American community produced model figures of immigrant consciousnesses who not only accepted but celebrated the Boston culture that Emerson and Thoreau were transcending. Boston: one man's prison, another man's promised land. O'Reilly inspired his community with newfound nativism: "no treason we bring from Erin—nor bring we shame nor guilt!" he wrote in "The Exile of the Gael"⁴²—an attitude for which he was rewarded with the respect of the local cultural community. Similarly, Bishop Fitzpatrick had the bearing, the cultivated tastes in music, art, and literature, the Whig values and Beacon Hill tone, the living image that earned him respect in the Brahmin community.

Boston represented the immigrant's city upon a hill, his mode of ascent from the cultural bogs of Europe. There is a fine moment in James Carroll's novel *Mortal Friends* which catches this Gatsby-like yearning for the finer things. His hero, Colman Brady, an Irish immigrant, discovers Louisburg Square and finds his heart's ease.

[At] Louisburg Square he felt an enormous and inexplicable relief, as if he were seeing something for which he had been desperately searching. The harmony of construction, purpose, use, history was what moved him. This was a world in which all conflicts—architectural, cultural, esthetic—had been resolved in the perfect tension of the classic. . . . Louisburg Square was an example of what Anglo-Saxon culture at its best could achieve, and Brady, for the first time in years, felt absolutely at home.⁴³

So begins the internal split in the Irish community between those who aspire to the Yankees' level and those who wish to level the Yankees, inside and outside Fenway Park.

If there is a single institution that articulates a single idea of Boston's cultural excellence, as Louisburg Square embodies its architectural achievement, it is Boston Latin School. John Bernard Fitzpatrick, the most influential figure in the

Boston Irish community in the nineteenth century, attended Latin School, along with Charles Sumner, Wendell Phillips, Henry Ward Beecher, and two future mayors of Boston. As Thomas H. O'Connor notes in *Fitzpatrick's Boston*, Latin School shaped Fitzpatrick's culture and consciousness.⁴⁴ Located in various Boston sites, it translated the idea of the city upon a hill into educational terms. Latin School offered Boston culture to the children of the Brahmin class and to the best and brightest children of the newcomers.

A century after Fitzpatrick attended, Theodore H. White walked the four miles, to save car fare, from Erie Street in Dorchester to Boston Public Latin School, then in the Fenway, and sat amid the ghosts of Franklin, various Adamases, Hancock, Emerson, Fitzpatrick, Joseph P. Kennedy, and other distinguished alumni. He also went to Hebrew school, so he retained his separate sense of cultural pride, but Latin School and later Harvard gave him the best that Boston culture had to offer. White took his opportunity and ran with it: he left Boston for New York and his first assignment in China in September 1938, on the day of the great hurricane.⁴⁵ Not far behind White at Boston Latin came Nat Hentoff, who, like White, daily encountered anti-Semitic "Irishers" and attended Hebrew school, though neither White nor Hentoff learned hatred or isolation from these experiences. Rather, Hentoff tells us in *Boston Boy*, Latin School constituted a world within the city where he could be transformed. It was

neutral ground when I was growing up a Boston boy. Under the purple-and-white flag of Boston Latin School, we were all united—the Irish, the Italians, the Jews, the Greeks, the Scots, the Armenians, the relatively few Yankees who still went there (the others no longer applied because all the rest of us were there), and the far fewer blacks.⁴⁶

Latin School in particular, not the Boston Public Schools, has been Boston's *common ground*. Well educated, Hentoff too left Boston for New York's wider field, of jazz and journalism.

As Hentoff implies, the Boston experience has been less fortunate for its black citizens. Bill Russell has told us that Boston is a racist city. W.E.B. Du Bois stated the case against Boston most dramatically. "A colored person in Boston was more neighbor to a colored person in Chicago than to the white person across the street."⁴⁷ On the other hand, at Harvard, where he was befriended and supported by William James, Du Bois found a haven. Half a century later, Malcolm Little also found Boston daunting; convicted of robbery, he was sent to Norfolk Prison. In 1962, when he was known as Malcolm X, he spoke at the Harvard Law School; as he tells us in his autobiography,

I happened to glance through a window. Abruptly, I realized that I was looking in the direction of the apartment house that was my old burglary gang's hideout. . . . Scenes from my once depraved life flashed through my mind.⁴⁸

Du Bois saw Boston in terms of cultural exclusiveness; Malcolm X in moral imagery, terms John Winthrop or Cotton Mather would have understood. Race has posed Boston's most extreme example of cultural juxtaposition. Both Du Bois and Malcolm X, however, found remnants of Boston's city upon a hill at Harvard. Cambridge inspired them to account for such contrasts in their writ-

ings. Arrival in Boston expanded their sense of the possible.

Yet Boston is often eloquently portrayed as a fine place to have left. Perhaps Benjamin Franklin established the route, from imprisonment in Boston to freedom elsewhere. In his autobiography, Franklin tells us how he chafed as apprentice under the direction of his brother, publisher of the *New England Courant*. Franklin's Boston meant no indulgences, so "I took it upon me to assert my Freedom," though this "Errata" gave him requisite regional guilt. He describes in detail his entry into Philadelphia so that his readers may "compare such unlikely Beginnings with the Figure I have since made there."⁴⁹ In short, Franklin's escape was a pilgrim's progress from bonded servitude and fixed role to a place where he could invent many useful gadgets, from stoves to glasses, and create many worthy selves. In his unfinished autobiography, Robert Lowell describes his beginnings at a point of high privilege, at 91 Revere Street, far removed in time and culture from Franklin's constricted origins. "Like Henry Adams, I was born under the shadow of the Dome of the Boston State House."⁵⁰ Like Franklin and Adams, Lowell too felt daunted by Boston's burden of history and role expectations. In *Life Studies* and *For the Union Dead*, Lowell tells us that his mother felt "barely perched on the outer rim of decency" at 91 Revere Street. "We were less than fifty yards from Louisburg Square," said her furious son, "the cynosure of old historic Boston's plain-spoken, cold roast elite—the Hub of the Hub of the Universe. Fifty yards!"⁵¹ Lowell agreed with his second wife's denunciation of Boston: Elizabeth Hardwick held that Boston had "an utter absence of that wild, electric beauty of New York."⁵² Yet Lowell, along with his first two wives, has taught us how to see Boston's doubleness. Helen Vendler, who suggests that "the *genius loci* lives only where poetry creates it," agrees:

The Boston State House, the Shaw Memorial, Beacon Street, the Boston Burying Ground . . . are different now because they are wreathed, invisibly but powerfully, in Lowell's lines.⁵³

To get the full force of Boston's initial attraction, we must look to outsiders, to those who configure it in their imagination or experience it freshly, not those who were born in Boston or had long lived here. Robert Lowell's first wife, Jean Stafford, who was from Colorado, in her novel *Boston Adventure* invented a character who imagines Boston as a heavenly city that is the opposite of her own poor life in Chichester, a scruffy town north of Boston. Sonia prays to live on Pinckney Street. When she finally enters the home of Miss Pride, which faces Louisburg Square, she experiences a thrill of arrival similar to what James Carroll's Colman Brady felt. "Here," thinks Sonia,

as if it were an oasis chosen to delight the eyes of some favored heavenly power, the sun, hidden elsewhere by the city's smoke, shone brilliantly on white doorways and their brass trimmings.⁵⁴

However, all this turns out to be more mirage than oasis for Sonia. Miss Pride's Pinckney Street is no more hospitable to a young woman than Revere Street was to the poet as a Brahmin young man, fifty yards away.

For an unambiguously celebratory vision of Boston, we must look farther

outside, to another Englishman abroad, Charles Dickens, who, like Winthrop before him, approached Boston with great expectations and a political determination to make it look good in comparison with London. Dickens's arrival stresses Boston's bright promise.

When I got into the streets upon this Sunday morning, the air was so clear, the houses were so bright and gay, the signboards were painted in such gaudy colours; the gilded letters were so very golden; the bricks were so very red, the stone was so very white, the blinds and area railings were so very green, the knobs and plates upon the street doors so marvelously bright and twinkling; and all so slight and unsubstantial in appearance—that every thoroughfare in the city looked like a scene in a pantomime.⁵⁵

Dickens, of course, found qualities in Boston which were lacking in London. Dickens's city upon a hill, like Winthrop's, looked back in anger as much as it looked forward with great expectations. For all of its élan, however, we should note the diminishment of Boston from Winthrop's city upon a hill to Dickens's pantomime. (See here John Updike's description of Fenway Park as a "lusty little bandbox" in his essay on Ted Williams's final game, "Hub Fans Bid Kid Adieu." "Everything is painted green and seems in curiously sharp focus, like the inside of an old-fashioned peeping-type Easter egg.") In the "unsubstantial-looking" suburbs Dickens found the white wooden houses with green jalousie blinds, the small churches and chapels, so rootless and bright "that I almost believed the whole affair could be taken piecemeal like a child's toy, and crammed into a little box."⁵⁶

Or a small book. F. O. Matthiessen's *American Renaissance* centers upon books written in the 1850s, largely by those in Greater Boston.⁵⁷ "Everyone in Cambridge appeared to be writing a book" then, said Van Wyck Brooks in *The Flowering of New England*.⁵⁸ (Brooks built his informing metaphor of Boston upon Oswald Spengler's theory of the "culture-cycle": New England's "flowering" withers into "Indian summer."⁵⁹ "What formerly grew from the soil begins to be planned. . . . What has once been vital becomes provincial."⁶⁰ Yet, even in its diminishment, Brooks's New England mind impressed itself upon the national consciousness, as witness Robert Frost's mediation "between New England and the mind of the rest of the nation."⁶¹ Though Brooks's New England follows Spengler's pattern of cultural decline and fall, it teaches Americans that "one could be regional . . . without being provincial.") The Boston of Matthiessen and Brooks fulfilled its destiny "to lead the civilization of North America," as Emerson grudgingly admits, by producing books.⁶²

Those who contrive visions and revisions of Boston—all imagery, like Tip O'Neill's politics, is local—do so in *books* and in full awareness that they are adding to Boston's great tradition of letters. Houghton Mifflin; Little, Brown; the Athenaeum; the Boston Public Library; and various quasi-literary clubs have all helped retain a literary presence in Boston, but Harvard and certain literary journals have been most important. Boston meant books and journals to nineteenth-century America. Consider, briefly, the cases of three literary Bostonians from the period of the American Renaissance and just after—Margaret Fuller, William Dean Howells, and Mark Twain—to sense the inner pull and outer push of Boston's literary presence.

Margaret Fuller was educated by her father to higher things than getting and spending or domesticity. "She sprang from the head of all the Zeuses about: her father, Timothy Fuller, Emerson, Goethe," said Elizabeth Hardwick recently in the *New York Review of Books*.⁶³ Hardwick thinks Fuller was "born in the wrong place," because Boston did not fully appreciate her genius. It is true that Margaret Fuller developed her rhetorical gifts in domestic settings, at gatherings in the rooms of Miss Elizabeth Peabody in West Street, rather than on the bully pulpits that men climbed; it is true that she moved to New York in 1844 to become a regular reviewer for Horace Greeley's *New York Tribune*. But in Boston, perhaps as in no other American place, Margaret Fuller learned devotion to what Perry Miller, her most dedicated celebrator, called "the life of the mind";⁶⁴ became editor of the *Dial*, the central organ of transcendentalism; and wrote *Women in the Nineteenth Century*. When Margaret Fuller said, "Let them [women] be sea-captains if they like," she appropriated Boston's nautical imagery for social and intellectual exploration.⁶⁵ She inspired two New England writers to create compelling literary characterization modeled upon her: the heroines of Holmes's *Elsie Venner*⁶⁶ and Hawthorne's *Blithedale Romance*. More important, she emerged from her New England education as the model of the American woman who speaks and writes in her own independent voice.

William Dean Howells was drawn to Boston by the possibility of transformation that it promised. No one has better articulated or shaped the myth of literary Boston than he. In *Life and Letters*, Howells recalls "a visiting young lady from New England" who came to Columbus, Ohio, when he was a young, provincial newspaper reporter. She "screamed at the sight of the periodical in one of our houses, 'Why, have you got the *Atlantic Monthly* out here?' " Stung, Howells assured her "there are several contributors to the *Atlantic* in Columbus."⁶⁷ Two, to be exact: Howells and his roommate! Howells's early life was marked by a sense of cultural deprivation, for which he imagined Boston the anodyne. In time he would marry the New England young lady, Elinor G. Mead, and become editor of the *Atlantic*, the apostolic successor to Brahmin culture.

Similarly, Howells would marry, then separate himself from, the idea of Boston. Boston was his before he was Boston's, for he created it out of his own imaginative and cultural need; he came here from the stark banks of the Ohio. Boston meant *family* to Howells, whose "whole life," he tells us, "had been passed in a region where . . . the conception of family life was very imperfect." Boston meant roots, identity, and history to Howells, though he suspected from the first that all this could be limiting, for he told James Russell Lowell that "human nature has had more ground to spread over in the West."⁶⁸ Still, Boston at first overwhelmed him, as he recollected forty years later in *Literary Friends and Acquaintance*.

A great city it seemed to me then, and a seething vortex of business as well as a whirl of gayety, as I saw it in Washington Street, and in a promenade concert at Copeland's restaurant in Tremont Row. Probably I brought some idealizing force to bear upon it, . . . perhaps I accounted for quality as well as quantity in my impressions of the New England metropolis. It seemed to me old . . . and very likely I credited the actual town with all the dead and gone Bostonians in my sentimental census.⁶⁹

Boston, as we have seen, nurtures such “idealizing force,” inspires its observers to metaphorical reach and grasp. Howells’s Boston, at first “a seething vortex,” became in his memory, forty years later, a madeleine of remembrance of things past. Boston recollected in tranquillity seemed “like a web of old lace, which I have to take carefully into my hold for fear of its fragility, and make out as best I can the figure once so distinct in it.”⁷⁰ Between the vortex and the lace were Howells’s Boston-Cambridge years, when he was editor of the *Atlantic* and built the city in his novelistic imagination, much as Silas Lapham built his house in the raw Back Bay. The Lapham house burned, a symbol of Silas’s self-consuming ambition that confronts New England’s moral chill, the same iron cold that characterized the moral atmosphere of James’s *Bostonians*. Both Howells and James separated themselves from Boston’s fire and ice. Howells came to see Boston as “marred by the intense ethicism that pervaded the New England mind for two hundred years and that still characterizes it.”⁷¹ Howells, therefore, demonstrates the stages of emotional development that Boston so frequently induces: first *enchantment*, as the outsider seeks to match the city upon a hill of his imagination with the Boston he sees; then *development*, as Boston prods the newcomer to articulate his full powers; finally *disenchantment*, as Boston’s narrow geographic, aesthetic, and moral territories close in. Howells escaped Boston’s snobbery, “ethicism,” and aesthetic heavy-handedness, which confused literature with sermons. New York, Boston’s antiself, would provide Howells with more ground to spread over.

When Boston does not encourage such clear stages of perceptual development, it fosters ambivalence, as Mark Twain clearly illustrated when he decided to make sport of the Boston literati at John Greenleaf Whittier’s seventieth birthday dinner at the Hotel Brunswick, on December 17, 1877. Thirty years later he remembered his speech as “that disastrous cataclysm,” according to Justin Kaplan’s biography of Twain. Speaking before Whittier, Emerson, Holmes, and Longfellow, Twain had told the tale of western miners who complained that three tramps had stopped by their camp: Emerson, “a seedy little bit of a chap”; Holmes, “fat as a balloon”; and Longfellow, “built like a prize fighter.” Twain had been informed by one of the miners, as he told his puzzled audience, that these visitors “took over the cabin, gorged themselves on the miner’s bacon, beans, and whiskey, played cards with a greasy deck and cheated, and at seven the next morning left with the miner’s only pair of boots. ‘I’m going to move, . . . I ain’t suited to a littery atmosphere,’ ” said Twain’s miner! Howells tells us that Longfellow was puzzled, Holmes never stopped writing on his menu, and Emerson stared off into space while Twain spoke. Other guests, Twain recalled, “turned to a black frost.”⁷² Twain had called up the image of Boston he most feared and had exorcized it with humor, though he paid the price of guilt. For Twain, Boston represented the constricting civilization that he would later have Huck leave behind. “But I reckon I got to light out for the Territory ahead of the rest, because aunt Sally she’s going to adopt me and sivilize me and I can’t stand it. I been there before.”⁷³ In the landscape of Twain’s imagination, “aunt Sally” was from Boston, and he had “been there before,” at the Whittier dinner.

Despite those who resist it or leave it, there has been no end to the booking of Boston, for the city, as we have seen, has served as text for writers to impose

their imaginations upon. Howells was wrong about literary Boston, for writers come and go, drawn, as Howells and later Robert Manning drew writers, to the the *Atlantic*, drawn by Boston's proximity to summer places on the Cape and islands—Edmund Wilson's Wellfleet, John Dos Passos's Truro, Norman Mailer's Provincetown—and drawn by Boston's universities. Nor should Boston's vaunted medical facilities, particularly McLean Hospital in Belmont, be discounted as an attraction to writers. The image of Boston as *hub* suggests its radial influence as well as its concentric pull. Saul Bellow, Lillian Hellman, John Cheever, Ivan Gold, and so many more have come here to lecture or to teach. They, in turn, represent Boston in their writings, add to its evolving image.

For all that, Boston has never been easy for its inhabitants. From the beginning of the European settlement, it has offered a test of wills. Anne Bradstreet, an early arrival,

found a new world and new manners, at which my heart rose. But after I was convinced it was the way of God, I submitted to it and joined the church at Boston.⁷⁴

Boston continues to possess those who come to possess it. Dan Wakefield, for example, a current Beacon Hill resident, came to Boston as a Nieman Fellow at Harvard, then returned to teach at the University of Massachusetts at Boston and write for the *Atlantic*. Boston meant refuge, from New York: see *Starting Over*; or from Hollywood: see *Selling Out*. Boston's institutions provided a haven: particularly King's Chapel, where Wakefield became a church member, and Fenway Park, where he became a Red Sox fan.

I like to cross Commonwealth Avenue and go down Marlborough, past the postage stamp-sized front yards with lovingly tended gardens, looking in lighted windows, coming out on Arlington to the Public Garden and walking beside it down Beacon and on to The Hill, the sounds of the game behind me now, the colors of the uniformed players and the Park fading like a pleasant memory as I turn down Charles and know I am home.⁷⁵

In time he too "submitted to it and joined the church at Boston," or, as Frost put it in "The Gift Outright," he "found salvation in surrender."⁷⁶ For Wakefield, who stands for many other American writers, Boston means you *can* go home again, not back to the home place from which you escaped, but to an ideal American homeland, a national consciousness rooted in the mind. For these writers Boston embodies an idea of culture and community sometimes contradicted by its history.

Finally, Boston's most vivid literary presence has been what, in another context, Irish poet John Montague called "a flowering absence."⁷⁷ Its compelling image of *place* has so often been a remembrance of place or persons past or passing. John Updike connects himself to the idea of Boston by looking up Beacon Hill and recalling Robert Lowell's poetic evocation of sacrifice in "For the Union Dead."⁷⁸ That poem asks us to witness the gouged Common, opened for an "underworld garage," steam shovels shaking the Saint-Gaudens relief of Colonel Shaw.⁷⁹ Even the titles of our best fiction suggest fled glory: *The Last Puritan*, where Puritanism has its last, elegant gasp; *The Rise of Silas Lapham*, a novel that chronicles a fall much as *Boston Adventure* dramatizes an entrapment;

The Late George Apley, the last gasp of Brahmin Boston; and *The Last Hurrah*, the demise of high-style Irish-American politics in Boston.⁸⁰ We become reconciled to those groups which have ruled Boston with high and hard hands—the Yankees and the Celts, the Brahmins and the Bosses—to the extent we are persuaded by these useful fictions that their days are done.

In *The American Scene*, Henry James rediscovers remnants of the Boston in which he lived forty years before, in the early 1860s. When he returns to Beacon Hill in 1904, he confronts change but is reassured by an emblem of permanence: despite a clearance made for the enlargement of the State House, the brick house in Ashburton Place where he and his family had lived still stands, the same house in which he had heard of Hawthorne's death, the same house where he first dreamed of literary glory. Ashburton Place, for James is "a conscious memento, with old secrets to keep and old stories to witness for, a saturation of life as closed together and preserved in it as the scent lingering in a folded pocket handkerchief." Again, Boston is a reassuring, if miniaturized, emblem, akin to Updike's Easter egg or Howells's web of old lace. James, however, worked out his symbolic gloss too soon. When he returned to Beacon Hill a month later, the house was gone, razed! "It was as if the bottom had fallen out of one's own biography, and one plunged backward into space without meaning."

Yet James was unwilling to accept the idea of Boston as existential void; he reaffirmed his connection with the place by examining Boston from its topmost peak, Beacon Hill. "The top of Beacon Hill quite rakes, with but slightly shifting range, the old more definite Boston." Boston offered James conflicting images: blessedly, the Park Street Church still stood, though the faces of so many newcomers challenged his "small homogeneous Boston." Large commercial buildings suggested that "Boston, the bigger, braver, louder Boston, was 'away,' " that the Puritan "whip" had yielded to the businessman's "sponge." Yet his beloved Athenaeum still stood, the new Public Library rose in its majesty, Mount Vernon Street still resounded with implications.

To walk down Mount Vernon Street to Charles was . . . to recognize at least that we like the sense of age to come, locally, when it comes with the right accompaniments, with the preservation of character and the continuity of tradition, merits I had been admiring on the brow of the eminence.⁸¹

For James, Beacon Hill meant Boston. A beacon, a lookout, it provided a point of heightened perception and it offered a Boston of sufficient complexity to meet the requirements of his grasping imagination. On the hill, James could recompose a coherent Boston in his mind's eye out of the juxtaposed images of permanence and change before his actual eye.

From Winthrop to Wakefield, Boston has been a text in which we read our histories, ourselves. "A city that is set upon a hill cannot be hid" (Matthew 3:14). Hill, hub, common ground, peninsula, part of the mainland; landscape of sleet, snow, and moral high-pressure systems; a site suitable for memory and desire, the New Jerusalem or the next parish west of Ireland, a literary center and a political laboratory, Boston has been a place commensurate to our capacity for wonder. "We cannot escape" our environment, George Apley tells his son. "You can go to the ends of the earth but, in a sense, you will still be

in Boston.”⁸² Marquand here, of course, twits Boston’s noted provinciality, but he also implies that Boston is memorable, a moveable feast, for what it has *meant*. From the beginning of the European settlement, Boston has been an idea, an image, a trope, a metaphor, a poem, a meditation. “New England was founded consciously, and in no fit of absence of mind,” wrote Samuel Eliot Morison in *Builders of the Bay Colony*.⁸³ So, we see, Boston remains, a city whose accumulated imagery, more than its emblems of progress, gives it a fit presence of mind. ☛

Notes

1. Robert McCloskey, *Make Way for the Ducklings* (Harmondsworth, Middlesex, England: Penguin Books, 1985); E. B. White, *The Trumpet of the Swan* (New York, Evanston, and London: Harper & Row, 1970). These popular books for children portray Boston, particularly the Public Garden Duck Pond, as a safe haven from a threatening world.
2. Sam Bass Warner, Jr., *Province of Reason* (Cambridge, Mass.: Harvard University Press, 1984), 2.
3. *Ibid.*, 120.
4. *Ibid.*, 122.
5. *The WPA Guide to Massachusetts: The Federal Writers’ Project Guide to 1930s Massachusetts*, comp. Federal Writers’ Project of the Works Progress Administration for the State of Massachusetts (New York: Pantheon Press, 1983).
6. J. Anthony Lukas, *Common Ground: A Turbulent Decade in the Lives of Three American Families* (New York: Alfred A. Knopf, 1985).
7. Reported in David Arnold, “‘Common Ground’ Called Lacking by Black Leaders,” *Boston Globe*, 22 May 1986, 33.
8. Lukas, *Common Ground*, 79.
9. W. B. Yeats, “Remorse for Intemperate Speech,” in *W. B. Yeats: The Poems*, ed. Richard J. Finneran (New York: Macmillan Co., 1983), 254–55.
10. John Winthrop, “A Model of Christian Charity,” in *The American Puritans: Their Prose and Poetry*, ed. Perry Miller (New York: Columbia University Press, 1956), 83.
11. Robert Frost, “The Gift Outright,” in *The Poetry of Robert Frost*, ed. Edward Connery Lathem (New York: Holt, Rinehart and Winston, 1975), 348.
12. F. Scott Fitzgerald, *The Great Gatsby* (New York: Charles Scribner’s Sons, 1953), 182.
13. Walter Muir Whitehill, *Boston: A Topographical History*, 2d ed. (Cambridge, Mass.: Belknap Press of Harvard University Press, 1982), 1–95.
14. *Ibid.*, 7.
15. Samuel Eliot Morison, *Builders of the Bay Colony* (Boston: Northeastern University Press, 1981), 14–17.
16. Lukas, *Common Ground*, 377.
17. Winthrop, “A Model of Christian Charity,” 83.
18. Henry David Thoreau, *Walden and Civil Disobedience* (New York: W. W. Norton & Co., 1966), 108.
19. Frost, “The Oven Bird,” in *The Poetry of Robert Frost*, 119.
20. Cited in Morison, *Builders of the Bay Colony*, 42.

21. Henry Adams, *The Education of Henry Adams* (Boston and New York: Houghton Mifflin Co., 1918), 9.
22. Henry James, *The Bostonians* (Harmondsworth, Middlesex, England: Penguin Books, 1966), 152.
23. William Dean Howells, *The Rise of Silas Lapham* (Harmondsworth, Middlesex, England: Penguin Books, 1971), 286.
24. Edith Wharton, *The Age of Innocence* (New York, Evanston, and London: Harper & Row, 1970), 184.
25. Nathaniel Hawthorne, *The Blithedale Romance* (Harmondsworth, Middlesex, England: Penguin Books, 1983), 8.
26. Henry James, *The Europeans*, in *Three Novels: The Europeans, The Spoils of Poynton, The Sacred Fount* (New York, Evanston, and London: Harper & Row, 1968), 2.
27. Elizabeth Hardwick, *Sleepless Nights* (New York: Random House, 1979), 4.
28. Elizabeth Hardwick, "Boston: The Lost Ideal," in *The Penguin Book of Contemporary American Essays*, ed. Maureen Howard (New York: Viking-Penguin, 1984), 249-61.
29. *Ibid.*, 249.
30. Nathaniel Hawthorne, *Passages from the American Note-Books of Nathaniel Hawthorne*, vol. 1 (Boston: Houghton Mifflin and Co., 1868), 222.
31. Thoreau, *Walden*, 125.
32. Wright Morris, *The Territory Ahead* (New York: Atheneum, 1963).
33. Ralph Waldo Emerson, "Nature," in *Selected Essays* (Harmondsworth, Middlesex, England: Penguin Books, 1982), 38.
34. Emerson, "Nature," in *Selected Essays*, 81.
35. Joel Porte, ed., *Emerson in His Journals* (Cambridge, Mass.: Belknap Press of Harvard University Press, 1982), 269.
36. Irving Howe, *The American Newness: Culture and Politics in the Age of Emerson* (Cambridge, Mass.: Harvard University Press, 1986).
37. Cited in Van Wyck Brooks, *The Flowering of New England* (New York: E. P. Dutton & Co., 1936), 518.
38. Richard Lebeaux, *Thoreau's Seasons* (Amherst, Mass.: University of Massachusetts Press, 1984), 91.
39. Morris, 42.
40. Oscar Handlin, *Boston's Immigrants 1790-1865* (Cambridge, Mass.: Harvard University Press, 1941), 47.
41. Cited in William V. Shannon, *The American Irish: A Political and Social Portrait* (New York: Collier Books, 1966), 216.
42. John Boyle O'Reilly, "The Exile of the Gael," in James Jeffrey Roche, *Life of John Boyle O'Reilly, Together with His Complete Poems and Speeches*, ed. Mrs. John Boyle O'Reilly (New York: Cassell Publishing Co., 1891), 414-18.
43. James Carroll, *Mortal Friends* (Boston and Toronto: Little, Brown & Co., 1978), 164.
44. Thomas O'Connor, *Fitzpatrick's Boston: 1846-1866* (Boston: Northeastern University Press, 1984), 7-8.
45. Theodore H. White, *In Search of History: A Personal Adventure* (New York: Warner Books, 1981), 53-80.
46. Nat Hentoff, *Boston Boy* (New York: Alfred A. Knopf, 1986), 34.

47. Cited in Barbara Meil Hobson and Paul M. Wright, *Boston, A Study of Mind: An Exhibition Record* (Boston: Boston Public Library, 1977), 92.
48. Ibid., 95.
49. Leonard W. Labaree, Ralph L. Ketcham, Helen C. Boatfield, and Helene H. Fineman, eds., *The Autobiography of Benjamin Franklin* (New Haven and London: Yale University Press, 1964), 70-75.
50. Cited in Ian Hamilton, *Robert Lowell: A Biography* (New York: Random House, 1982), 3.
51. Robert Lowell, "91 Revere Street," in *Life Studies and For the Union Dead* (New York: Farrar, Straus and Giroux, 1964), 15.
52. Hardwick, "Boston: A Lost Ideal," in *The Penguin Book of Contemporary American Essays*, 253.
53. Helen Vendler, "Contemporary American Poetry," in *The Harvard Book of Contemporary American Poetry* (Cambridge, Mass.: Belknap Press of Harvard University Press, 1985), 15.
54. Jean Stafford, *Boston Adventure* (Garden City, N.Y.: Sun Dial Press, 1944), 128.
55. Charles Dickens, *American Notes* (Harmondsworth, Middlesex, England: Penguin Books, 1972), 76.
56. John Updike, "Hub Fans Bid Kid Adieu," in *Assorted Prose* (New York: Alfred A. Knopf, 1965), 127.
57. F. O. Matthiessen, *American Renaissance* (London, Oxford, and New York: Oxford University Press, 1941).
58. Brooks, *The Flowering of New England*, 171.
59. Brooks, *New England: Indian Summer* (New York: E. P. Dutton & Co., 1965).
60. Brooks, *The Flowering of New England*, 540.
61. Brooks, *New England: Indian Summer*, 544.
62. Cited by Alfred Habegger in introduction to Henry James, *The Bostonians* (Indianapolis: Bobbs-Merrill Co., 1976), xii.
63. Elizabeth Hardwick, "The Genius of Margaret Fuller," *New York Review of Books* 33, no. 6 (10 April 1986): 14.
64. Perry Miller, *Errand into the Wilderness* (Cambridge, Mass.: Belknap Press of Harvard University Press, 1956), ix.
65. Cited in Hardwick, "The Genius of Margaret Fuller," 17.
66. Oliver Wendell Holmes, *Elsie Venner: A Romance of Destiny* (New York: New American Library, 1961).
67. Cited by Clara Marburg Kirk and Rudolf Kirk, eds., in introduction to *William Dean Howells: Representative Selections* (New York: Hill and Wang, 1961), 18.
68. Ibid., 38.
69. Ibid., 39-40.
70. Ibid., 40.
71. Cited in Habegger in introduction to *The Bostonians*, xiv.
72. Justin Kaplan, *Mr. Clemens and Mark Twain* (New York: Simon and Schuster, 1966), 209-11.
73. Mark Twain, *Adventures of Huckleberry Finn* (New York: W. W. Norton & Co., 1977), 229.
74. Cited in Hobson and Wright, *Boston, A Study of Mind*, 82.
75. Dan Wakefield, "Evenings at Fenway Park," *Goodlife* (June-July 1985): 51.
76. Frost, "The Gift Outright," in *The Poetry of Robert Frost*, 348.

77. John Montague, "A Flowering Absence," in *The Dead Kingdom* (Winston-Salem, N.C.: Wake Forest University Press, 1984), 86.
78. Shaun O'Connell, "The Infrequent Family: In Search of Boston's Literary Community," *Boston Magazine* 67, no. 1 (January 1975): 44-47, 66-68, 85-87.
79. Robert Lowell, "For the Union Dead," in *Life Studies*, 70-72.
80. George Santayana, *The Last Puritan* (New York: Charles Scribner's Sons, 1944); John P. Marquand, *The Late George Apley* (New York: Pocket Books, 1971); Edwin O'Connor, *The Last Hurrah* (Boston: Little, Brown & Co., 1956).
81. Henry James, *The American Scene* (New York: Horizon Press, 1967), 1-71.
82. Marquand, *The Late George Apley*, 148-49.
83. Morison, *Builders of the Bay Colony*, 3.

Bibliography

- Adams, Henry. *The Education of Henry Adams*. Boston and New York: Houghton Mifflin Co., 1918.
- Amory, Cleveland. *The Proper Bostonians*. New York: E. P. Dutton & Co., 1947.
- Anderson, Frederick, William M. Gibson, and Henry Nash Smith, eds. *Selected Mark Twain-Howells Letters 1872-1910*. Cambridge, Mass.: Belknap Press of Harvard University Press, 1967.
- Brooks, Van Wyck. *The Flowering of New England*. New York: E. P. Dutton & Co., 1936.
- . *New England: Indian Summer*. New York: E. P. Dutton & Co., 1965.
- . *The World of Washington Irving*. New York: E. P. Dutton & Co., 1950.
- Carroll, James. *Mortal Friends*. Boston and Toronto: Little, Brown & Co., 1978.
- Curley, James Michael. *I'd Do It Again*. New York: Arno Press, 1976.
- Dickens, Charles. *American Notes*. Harmondsworth, Middlesex, England: Penguin Books, 1972.
- Dineen, Joseph F. *Ward Eight*. New York: Arno Press, 1976.
- Emerson, Ralph Waldo. *Selected Essays*. Harmondsworth, Middlesex, England: Penguin Books, 1982.
- Federal Writers' Project of the Works Progress Administration for the State of Massachusetts, comp. *The WPA Guide to Massachusetts: The Federal Writers' Project Guide to 1930s Massachusetts*. New York: Pantheon Press, 1983.
- Finneran, Richard J., ed. *W. B. Yeats: The Poems*. New York: Macmillan Co., 1983.
- Fitzgerald, F. Scott. *The Great Gatsby*. New York: Charles Scribner's Sons, 1953.
- Garreau, Joel. *The Nine Nations of North America*. Boston: Houghton Mifflin Co., 1981.
- Green, Martin. *The Problem of Boston: Some Readings in Common History*. New York: W. W. Norton & Co., 1966.
- Hamilton, Ian. *Robert Lowell: A Biography*. New York: Random House, 1982.
- Handlin, Oscar. *Boston's Immigrants 1790-1865*. Cambridge, Mass.: Harvard University Press, 1941.
- Hardwick, Elizabeth. "Boston: The Lost Ideal." In *The Penguin Book of Contemporary American Essays*. Edited by Maureen Howard. New York: Viking-Penguin, 1984.
- . "The Genius of Margaret Fuller." *New York Review of Books* 33, no. 6 (10 April 1986).
- . *Sleepless Nights*. New York: Random House, 1979.
- Hawthorne, Nathaniel. *The Blithedale Romance*. Harmondsworth, Middlesex, England: Penguin Books, 1983.

- . *Passages from the American Note-books of Nathaniel Hawthorne*. 2 vols. Boston: Houghton Mifflin and Co., 1868.
- Heaney, Seamus. *Preoccupations: Selected Prose 1968-1978*. New York: Farrar, Straus, Giroux, 1980.
- Hentoff, Nat. *Boston Boy*. New York: Alfred A. Knopf, 1986.
- Higgins, George V. *The Patriot Game*. New York: Ballantine Books, 1982.
- Hobson, Barbara Meil, and Paul M. Wright. *Boston, A Study of Mind: An Exhibition Record*. Boston: Boston Public Library, 1977.
- Holmes, Oliver Wendell. *Elsie Venner: A Romance of Destiny*. New York: New American Library, 1961.
- Howe, Irving. *The American Newness: Culture and Politics in the Age of Emerson*. Cambridge, Mass.: Harvard University Press, 1986.
- Howells, William Dean. *The Rise of Silas Lapham*. Harmondsworth, Middlesex, England: Penguin Books, 1971.
- James, Henry. *The American Scene*. New York: Horizon Press, 1967.
- . *The Bostonians*. Harmondsworth, Middlesex, England: Penguin Books, 1966.
- . *Three Novels: The Europeans, The Spoils of Poynton, The Sacred Fount*. New York, Evanston, and London: Harper & Row, 1968.
- Jones, Howard Mumford, and Bessie Zaban Jones, eds. *The Many Voices of Boston: A Historical Anthology 1630-1975*. Boston: Atlantic Monthly Press, Little, Brown & Co., 1975.
- Kaplan, Justin. *Mr. Clemens and Mark Twain*. New York: Simon and Schuster, 1966.
- Kay, Jane Holtz. *Lost Boston*. Boston: Houghton Mifflin Co., 1980.
- Kirk, Clara Marburg, and Rudolph Kirk, eds. *William Dean Howells: Representative Selections*. New York: Hill and Wang, 1961.
- Labaree, Leonard W., Ralph L. Ketcham, Helen C. Boatfield, and Helene H. Fineman, eds. *The Autobiography of Benjamin Franklin*. New Haven and London: Yale University Press, 1964.
- Lathem, Edward Connery, ed. *The Poetry of Robert Frost*. New York: Holt, Rinehart and Winston, 1975.
- . *Young Man Thoreau*. Amherst, Mass.: University of Massachusetts Press, 1977.
- Lebeaux, Richard. *Thoreau's Seasons*. Amherst, Mass.: University of Massachusetts Press, 1984.
- Llewellyn, Howard III, ed. *A Book for Boston*. Boston: David R. Godine, Publisher, 1980.
- Lowell, Robert. *Life Studies and For the Union Dead*. New York: Farrar, Straus and Giroux, 1964.
- Lukas, J. Anthony. *Common Ground: A Turbulent Decade in the Lives of Three American Families*. New York: Alfred A. Knopf, 1985.
- Lynch, Kevin. *The Image of the City*. Cambridge, Mass., and London: MIT Press, 1960.
- Marquand, John P. *The Late George Apley*. New York: Pocket Books, 1971.
- Matthiessen, F. O. *American Renaissance*. London, Oxford, and New York: Oxford University Press, 1941.
- McCloskey, Robert. *Make Way for the Ducklings*. Harmondsworth, Middlesex, England: Penguin Books, 1985.
- McCord, David. *About Boston: Sight, Sound, Flavor and Inflection*. Boston and Toronto: Little, Brown & Co., 1973.
- Miller, Perry. *Errand into the Wilderness*. Cambridge, Mass.: Belknap Press of Harvard University Press, 1956.
- Miller, Perry, ed. *The American Puritans: Their Prose and Poetry*. New York: Columbia University Press, 1956.

- Montague, John. *The Dead Kingdom*. Winston-Salem, N.C.: Wake Forest University Press, 1984.
- Morris, Wright. *The Territory Ahead*. New York: Atheneum, 1963.
- Morison, Samuel Eliot. *Builders of the Bay Colony*. Boston: Northeastern University Press, 1981.
- . *One Boy's Boston 1887-1901*. Boston: Northeastern University Press, 1982.
- O'Connell, Shaun. "The Infrequent Family: In Search of Boston's Literary Community." *Boston Magazine* 67, no. 1 (January 1975).
- O'Connor, Edwin. *The Last Hurrah*. Boston: Little, Brown & Co., 1956.
- O'Connor, Thomas. *Bibles, Brahmins and Bosses: A Short History of Boston*. Boston: Boston Public Library, 1976.
- . *Fitzpatrick's Boston: 1846-1866*. Boston: Northeastern University Press, 1984.
- Porte, Joel, ed. *Emerson in His Journals*. Cambridge, Mass.: Belknap Press of Harvard University Press, 1982.
- Roche, James Jeffrey. *Life of John Boyle O'Reilly, Together with His Complete Poems and Speeches*. Edited by Mrs. John Boyle O'Reilly. New York: Cassell Publishing Co., 1891.
- Santayana, George. *The Last Puritan*. New York: Charles Scribner's Sons, 1944.
- Schlesinger, Arthur, Jr. *The Best and the Last of Edwin O'Connor*. Boston and Toronto: Little, Brown & Co., 1970.
- Shannon, William V. *The American Irish: A Political and Social Portrait*. New York: Collier Books, 1966.
- Stafford, Jean. *Boston Adventure*. Garden City, N.Y.: Sun Dial Press, 1944.
- Strauss, Anselm L. *Images of the American City*. New York: Free Press of Glencoe, 1961.
- Thoreau, Henry David. *Walden and Civil Disobedience*. New York: W. W. Norton & Co., 1966.
- Twain, Mark. *Adventures of Huckleberry Finn*. New York: W. W. Norton & Co., 1977.
- Untermeyer, Louis, ed. *Robert Frost's Poems*. New York: Washington Square Press, 1971.
- Updike, John. *Assorted Prose*. New York: Alfred A. Knopf, 1965.
- Vendler, Helen. *The Harvard Book of Contemporary American Poetry*. Cambridge, Mass.: Belknap Press of Harvard University Press, 1985.
- Wakefield, Dan. "Evenings at Fenway Park." *Goodlife* (June-July 1985).
- Warner, Sam Bass, Jr. *Province of Reason*. Cambridge, Mass.: Harvard University Press, 1984.
- Warren, Austin. *The New England Conscience*. Ann Arbor: University of Michigan Press, 1967.
- Wharton, Edith. *The Age of Innocence*. New York, Evanston, and London: Harper & Row, 1970.
- White, E. B. *The Trumpet of the Swan*. New York, Evanston, and London: Harper & Row, 1970.
- White, Morton, and Lucia White. *The Intellectual Versus the City: From Thomas Jefferson to Frank Lloyd Wright*. Cambridge, Mass.: Harvard University Press and MIT Press, 1962.
- White, Theodore H. *In Search of History: A Personal Adventure*. New York: Warner Books, 1978.
- Whitehill, Walter Muir. *Boston: A Topographical History*, 2d ed. Cambridge, Mass.: Belknap Press of Harvard University Press, 1982.
- Wilson, Edmund, ed. *The American Earthquake*. Garden City, N.J.: Doubleday & Co., 1964.
- . *The Shock of Recognition*. New York: Farrar, Straus and Cudahy, 1943.
- Zuckerman, Michael. *Peaceable Kingdoms: New England Towns in the Eighteenth Century*. New York: Alfred A. Knopf, 1970.

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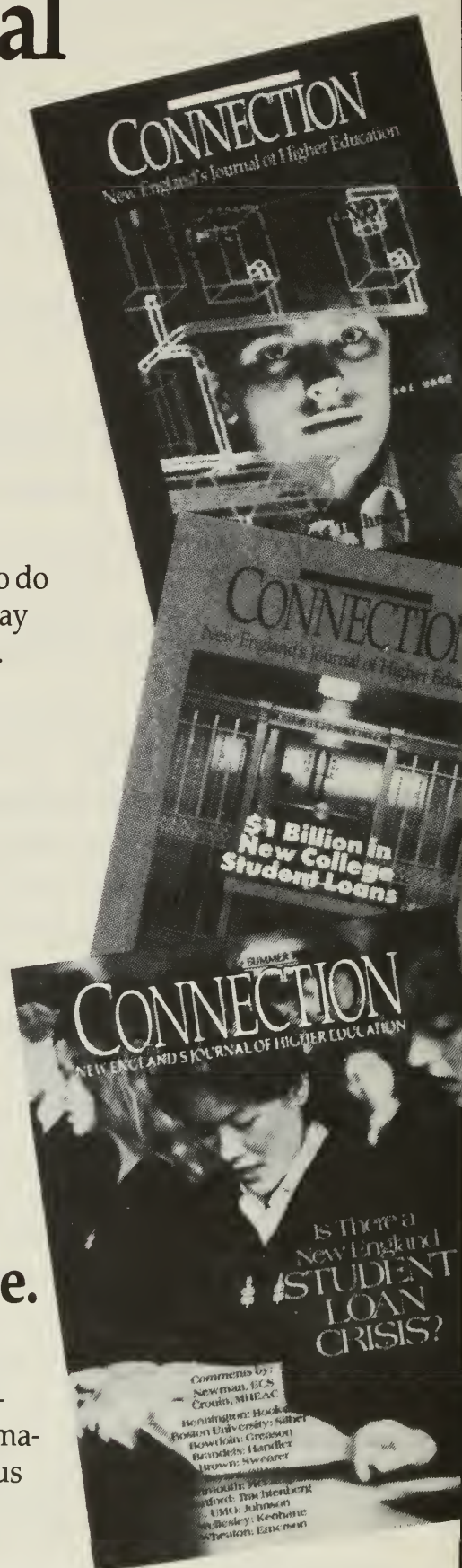
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 1. Robert Frost, "The Gift Outright," in *The Poetry of Robert Frost*, ed. Edward Connery Lathem (New York: Holt, Rinehart and Winston, 1975), 348.
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 3. Larabee, Leonard W., Ralph L. Ketcham, Helen C. Boatfield, and Helene H. Fineman, eds. *The Autobiography of Benjamin Franklin*. New Haven and London: Yale University Press, 1964.
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